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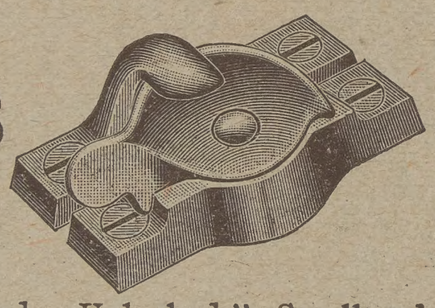

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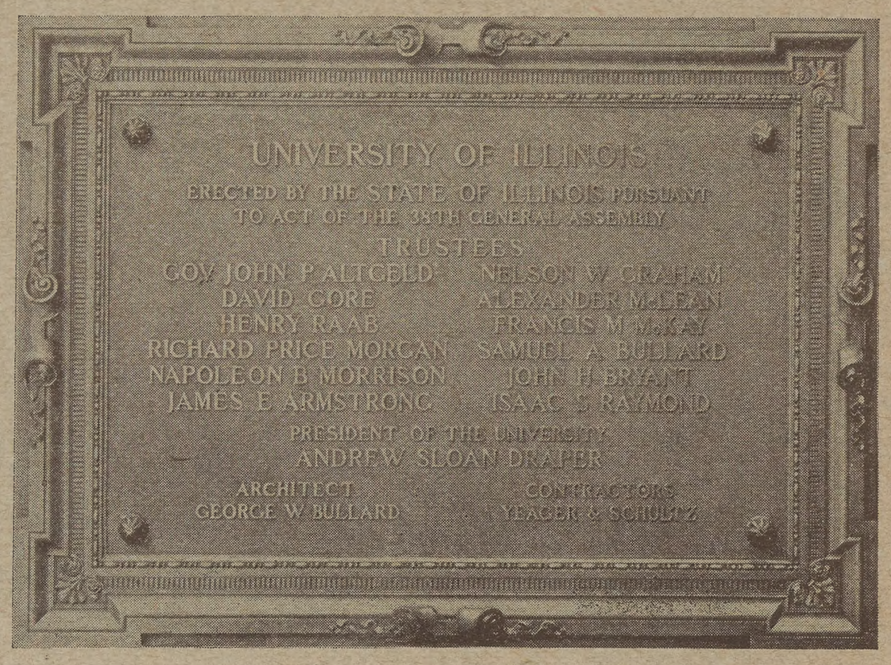

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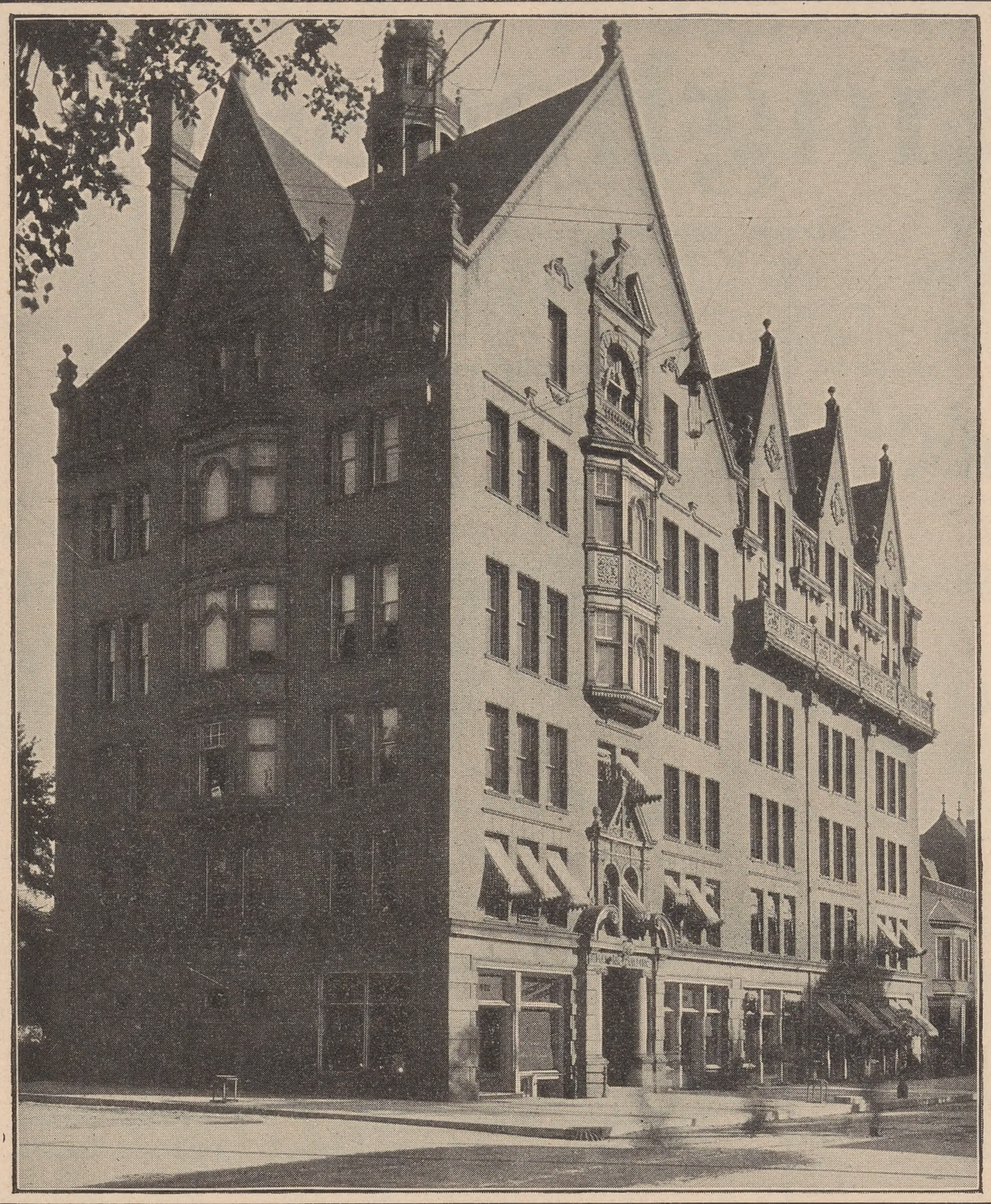

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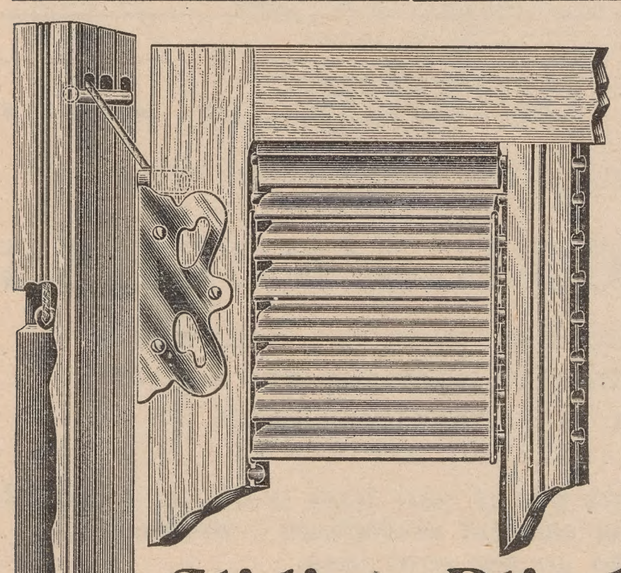

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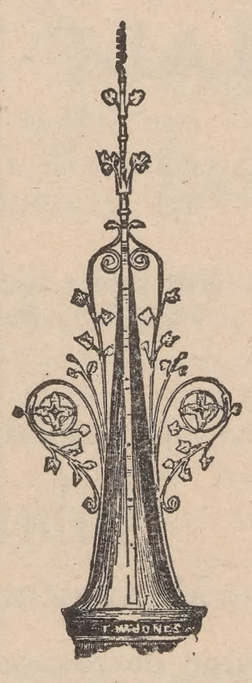

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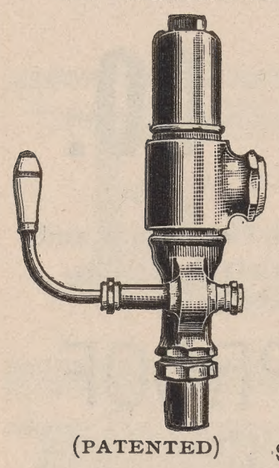

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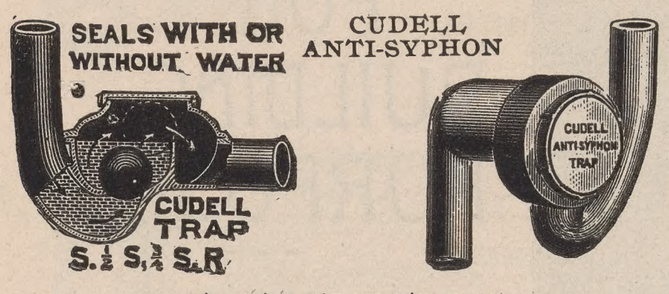

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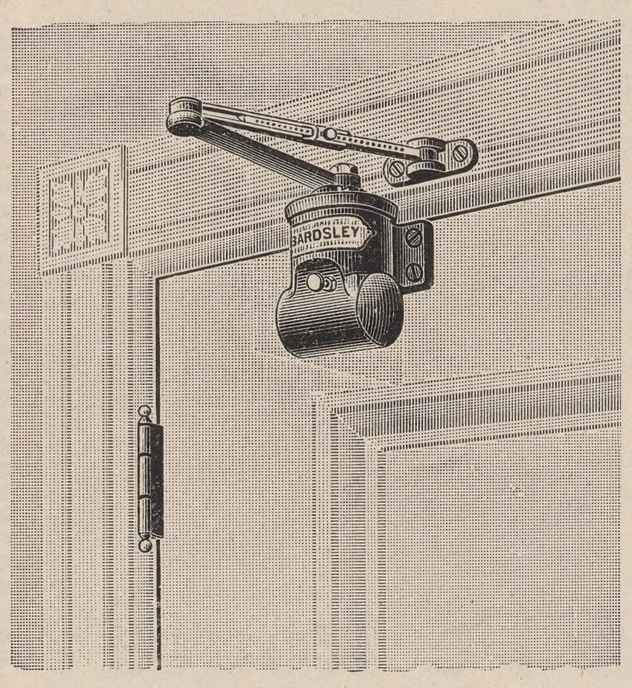

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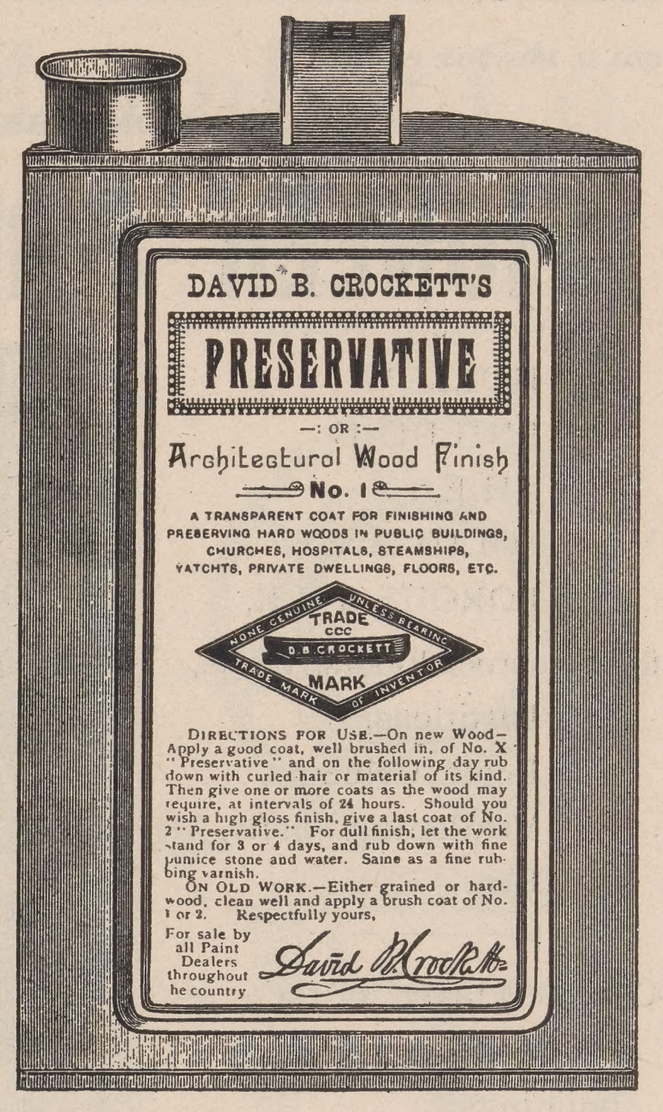
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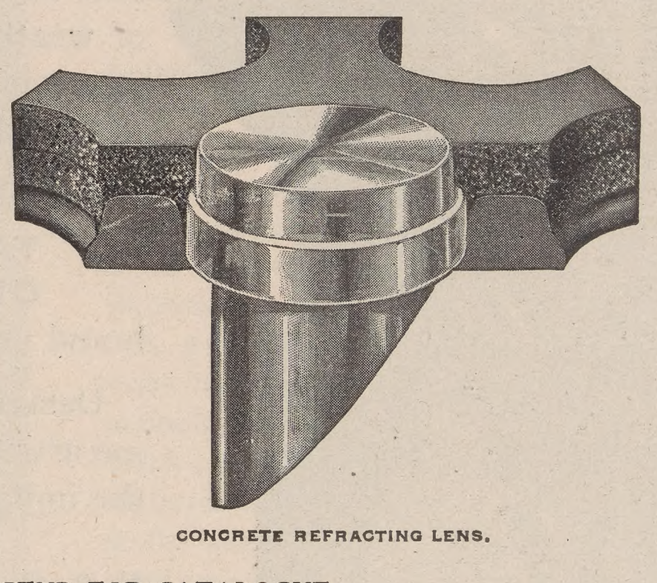

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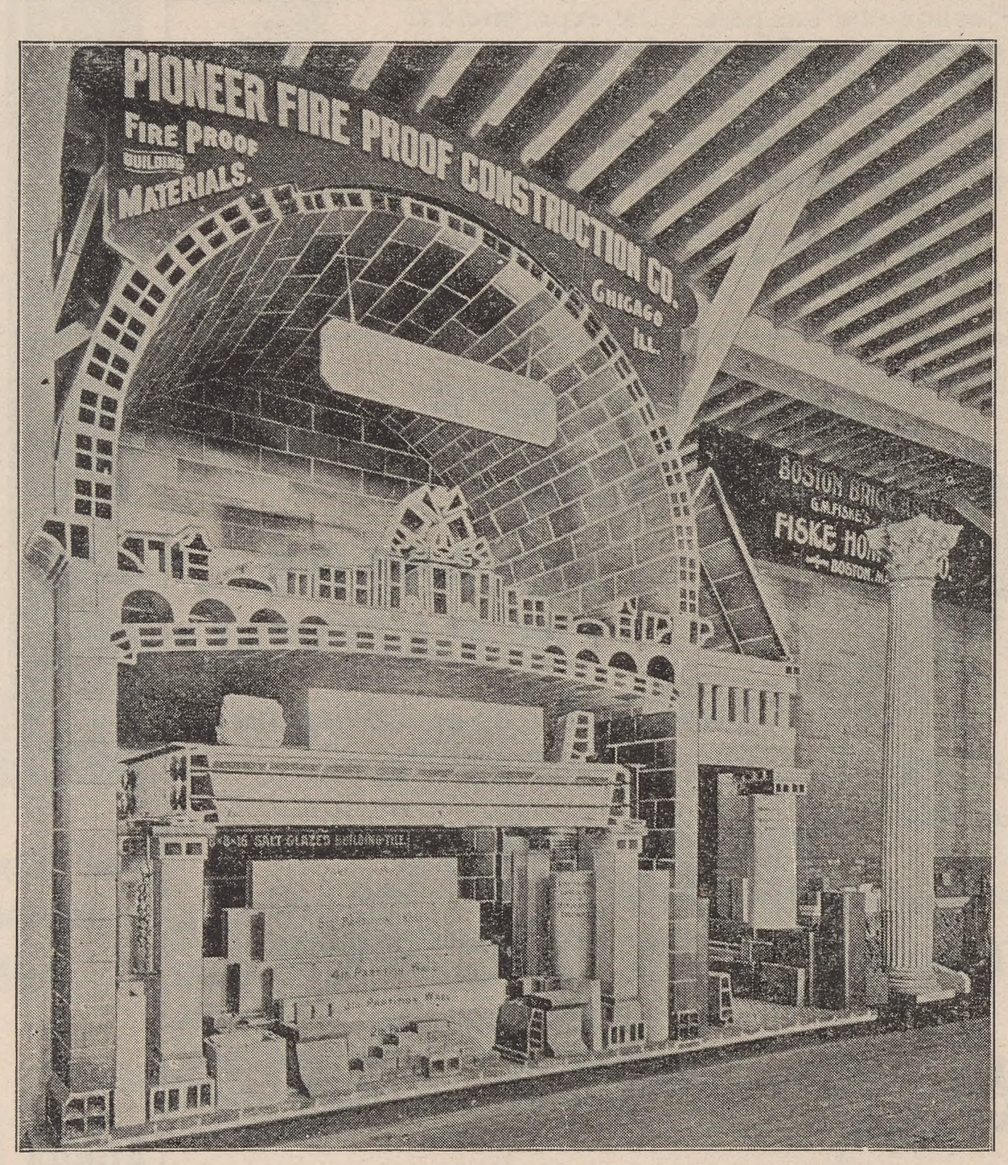

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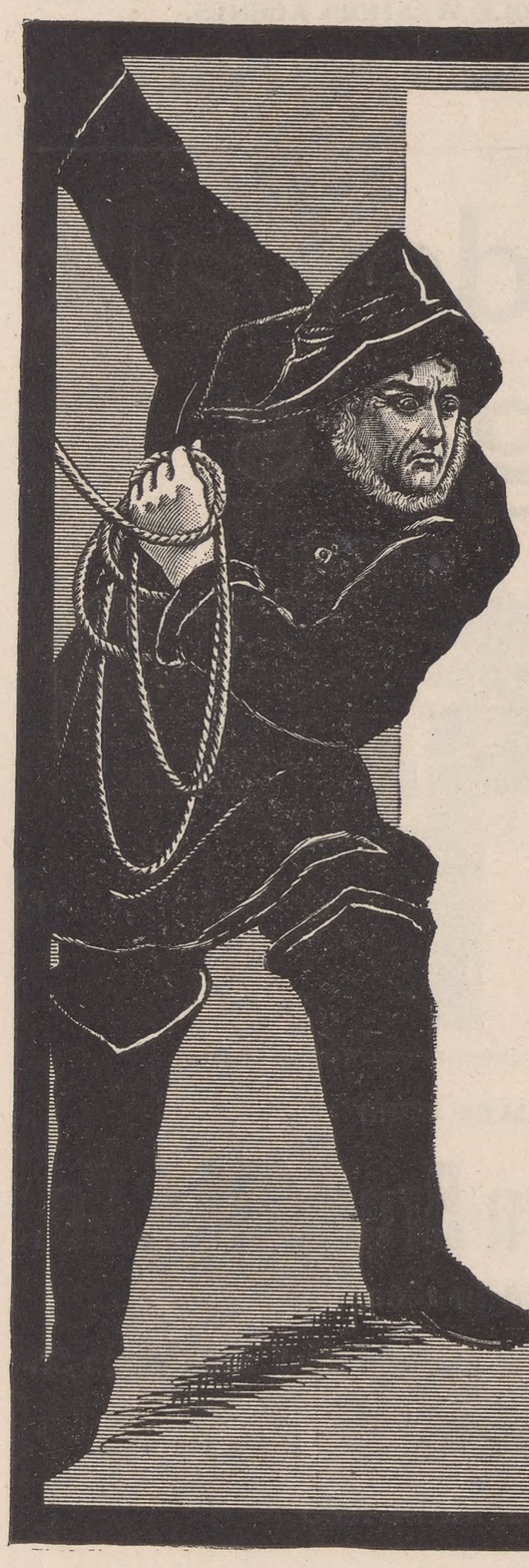

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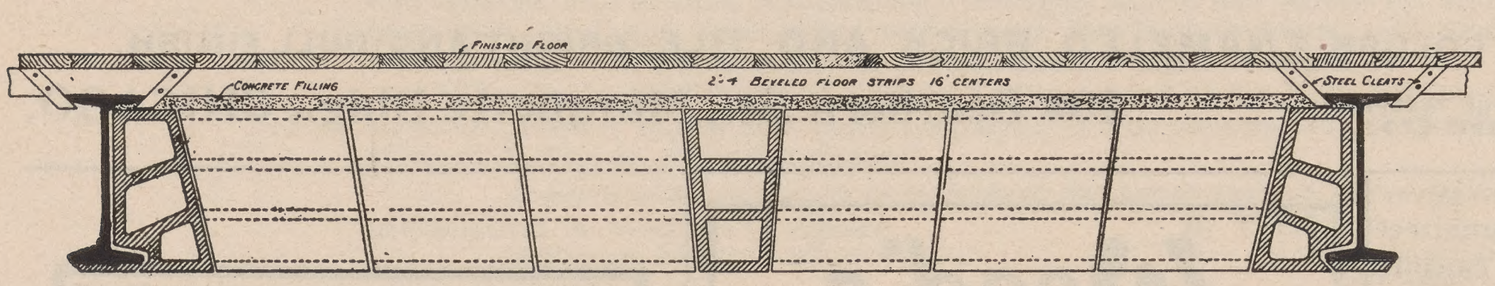

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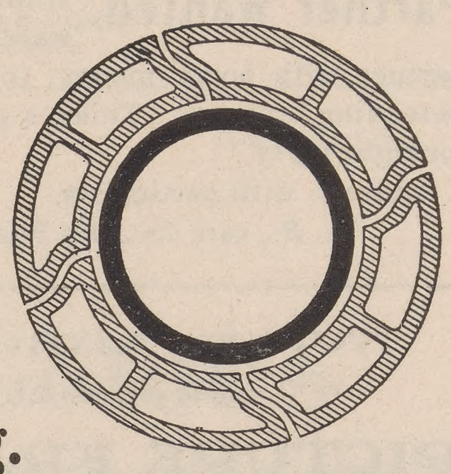

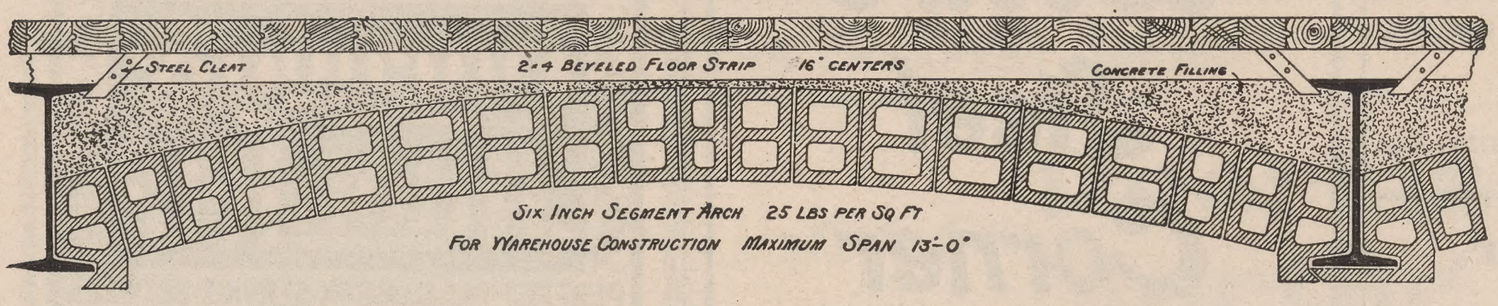
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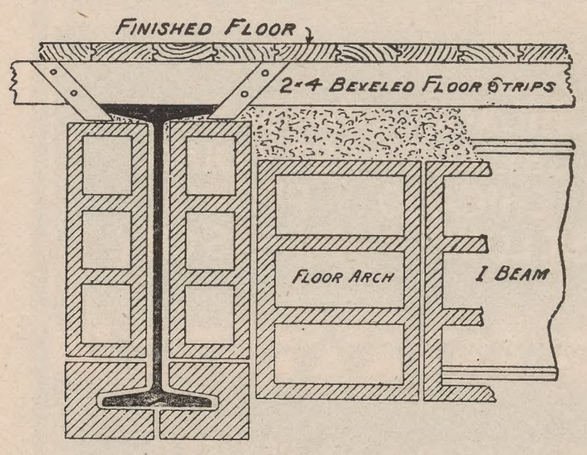

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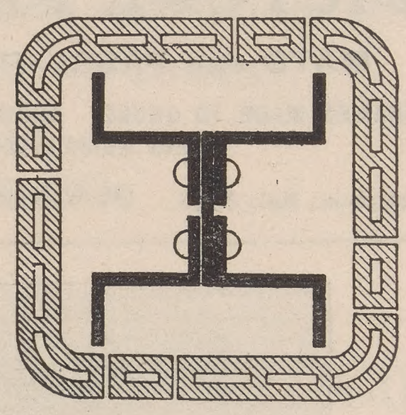

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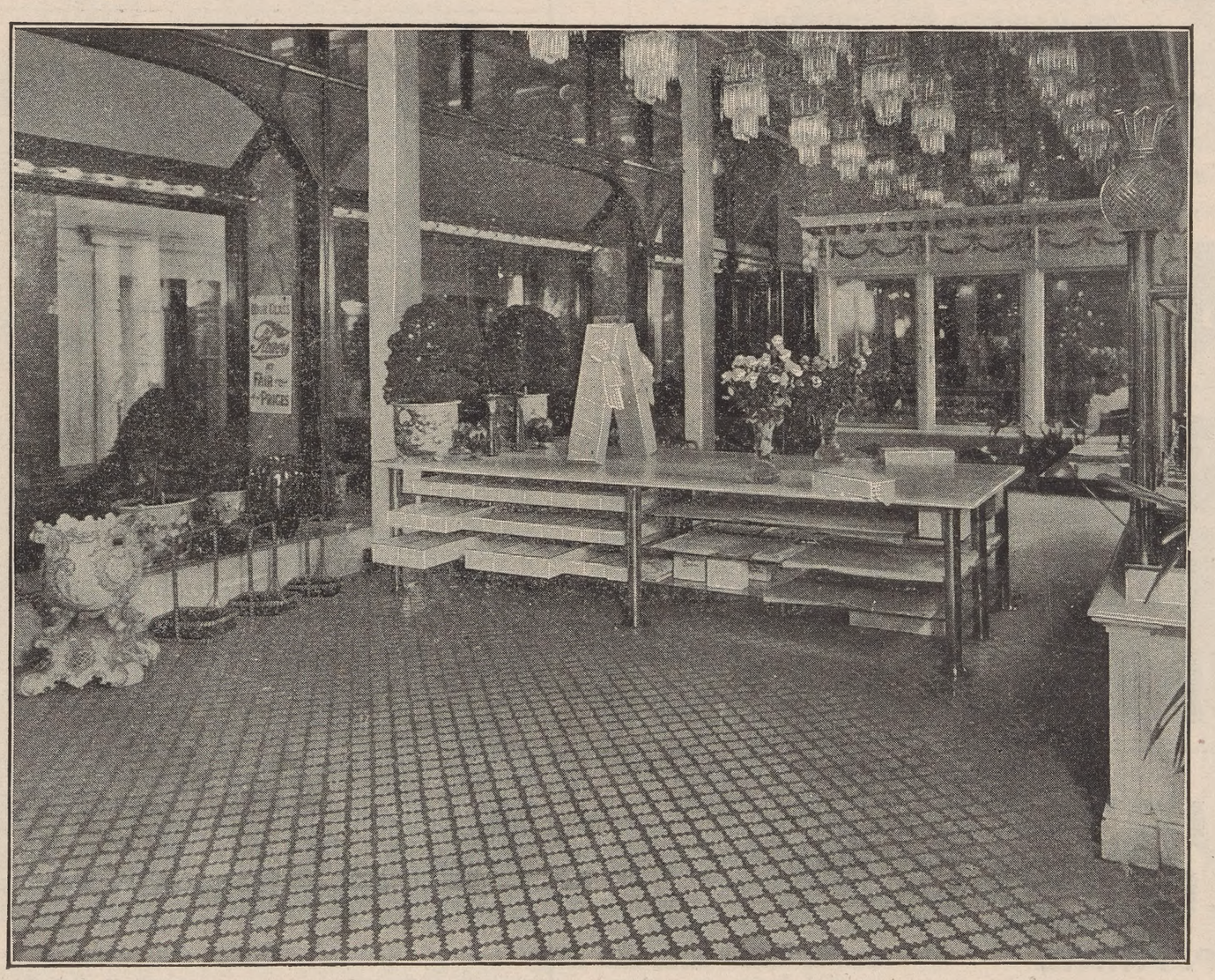

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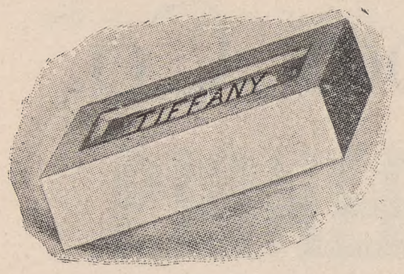

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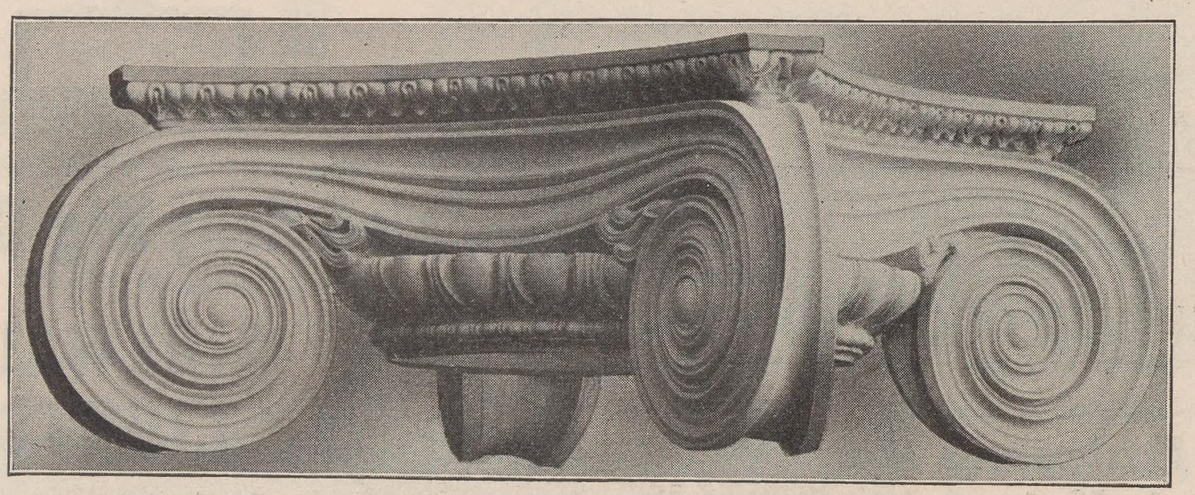

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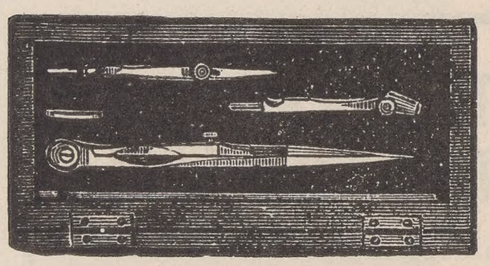

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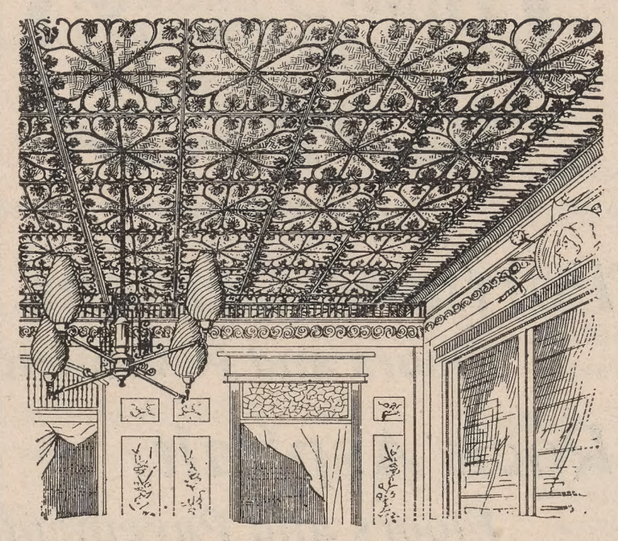

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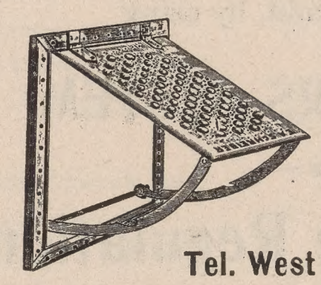

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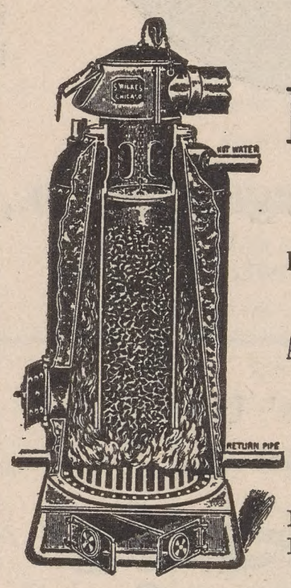

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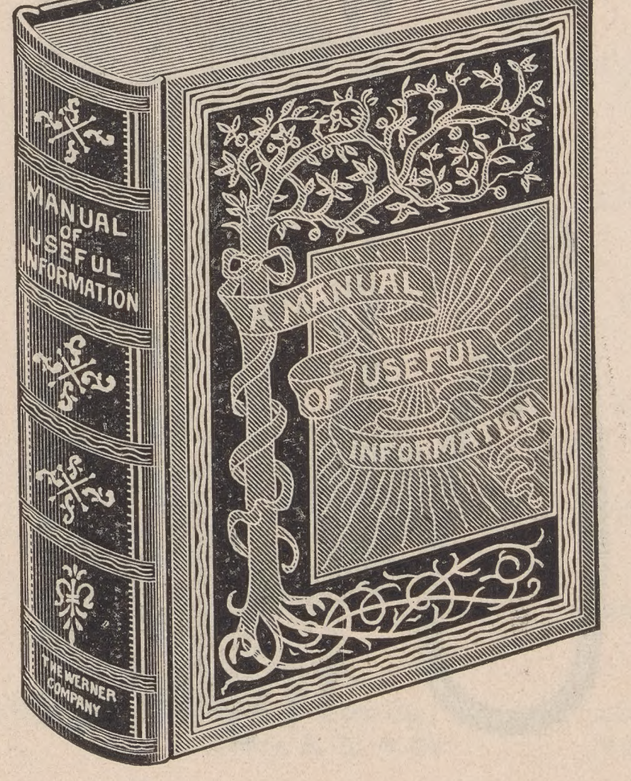

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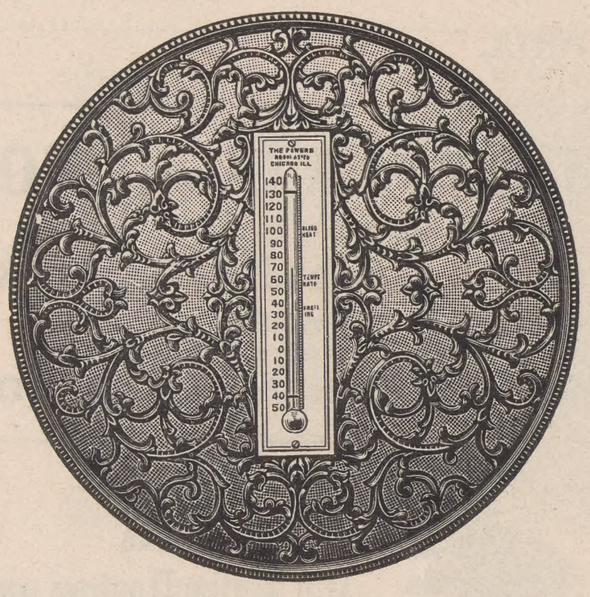

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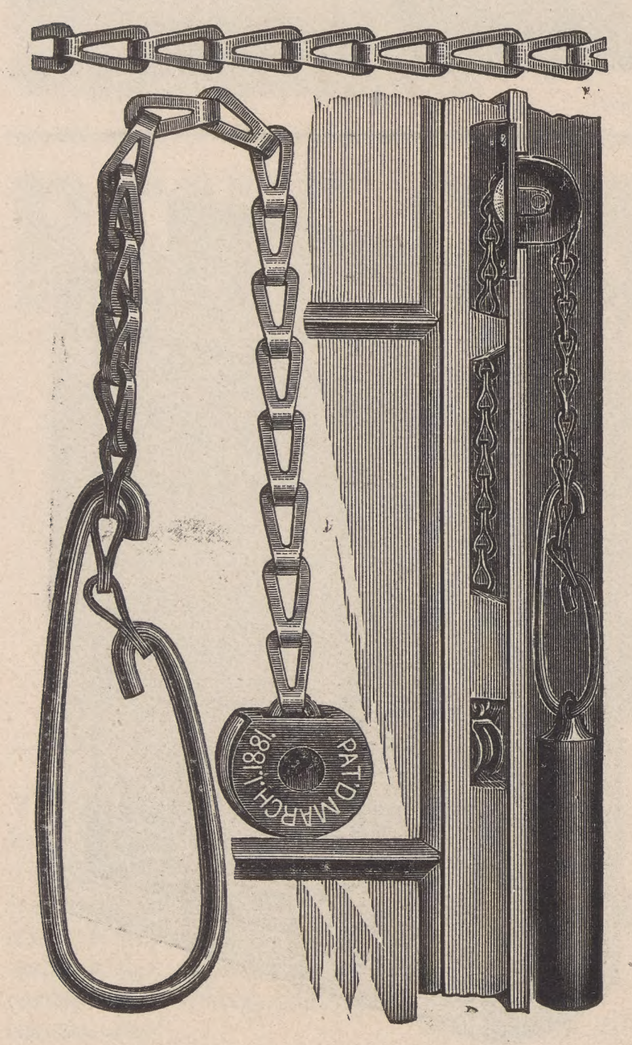

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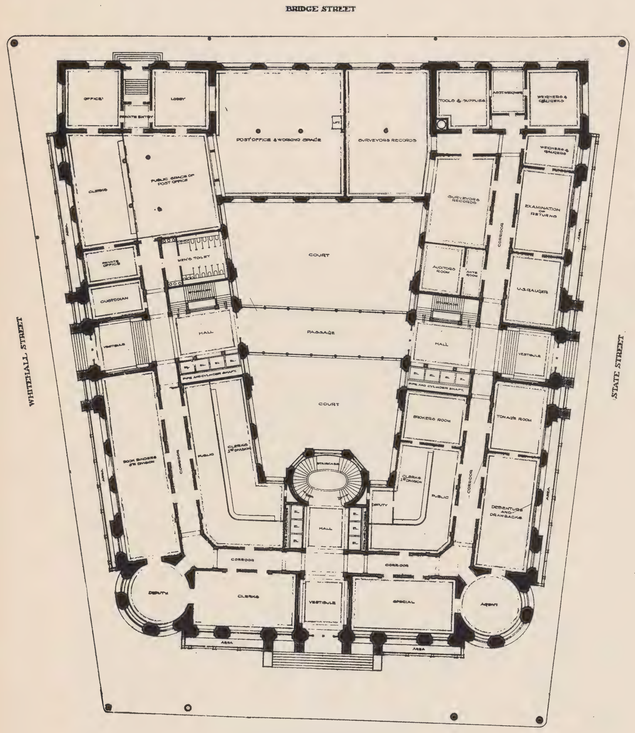

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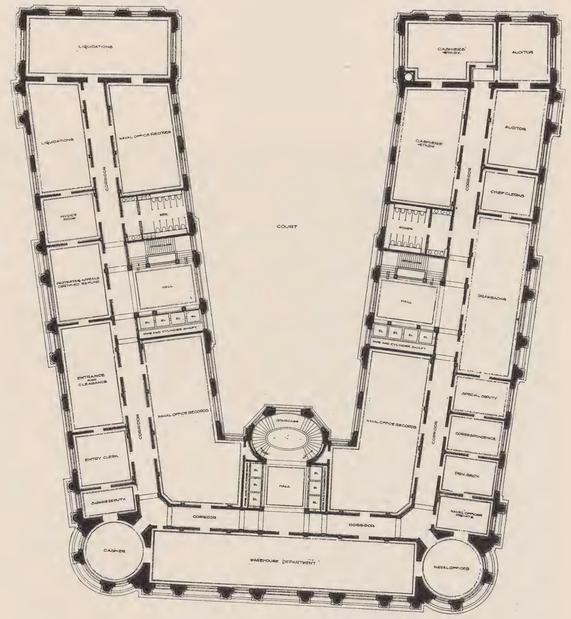

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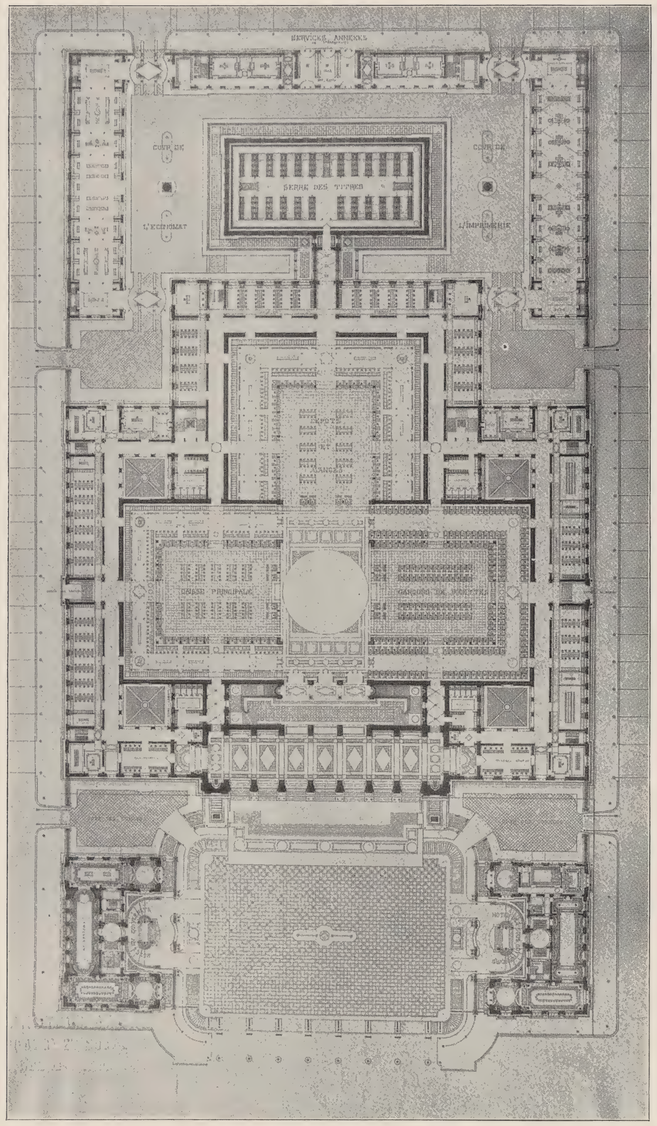

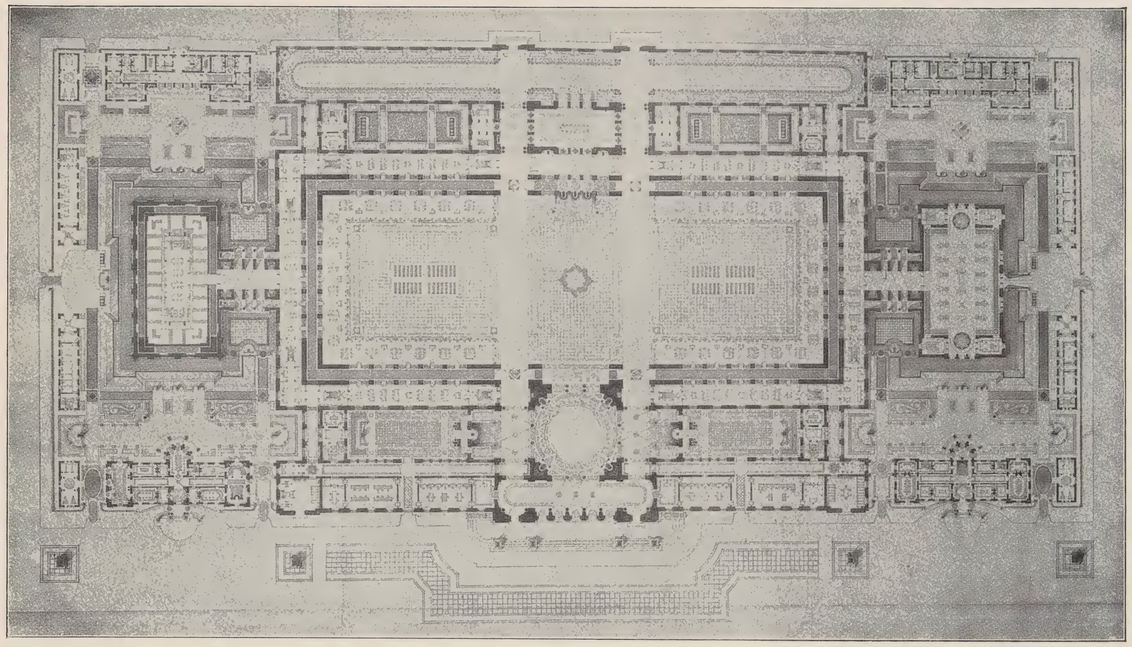

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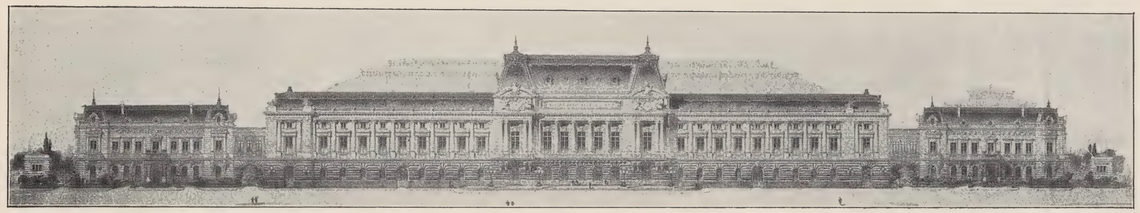

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CONSTRUCTION, DECORATION AND FURNISHING

IN THE WEST.

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Thirty-third Annual Convention, A. I. A.

The thirty-third annual convention of the American Institute of Architects was unique from many points of view. It must have been especially so to those members, and there were several in attendance, who saw the inception of the convention idea among architects leading to the foundation of the Institute some forty-five years ago. The program was arranged in advance, and consisted mainly of papers upon technical subjects and their discussion. The subjects for these were wisely chosen, and covered almost every phase of architectural thought and activity. The influences of foreign training upon American architectural art occupied one whole session, probably the most interesting of the convention, the next important session being devoted to skeleton steel construction and discussed just as ably and with as much critical enthusiasm. The fields of sculpture and of mural painting were reviewed, and, in fact, the architectural experience and wisdom of the whole country was drawn upon to place before architects at this closing year of the century the most advanced thought in each particular art and science involved in architectural design and construction.

An Exhaustive Exposition of Competition Status.

Prof. W. R. Ware's paper upon competitions was probably the most able exposition and analysis of competitive methods that can be written. His interest in the subject was first indicated by a paper written twenty-five years ago, and scarcely a year has passed during the period since that he has not been engaged as advisor or expert in some more or less noted competition. The paper was long, it was exhaustive in its history and minute in its analysis, but it was complete, and its importance rightly received instant recognition from the convention by the withdrawal of a competition code already formulated and in the printer's hand, and the directors ordered to prepare a new code upon the lines recommended in the paper, and in conference with its able author.

Valuable Inspection of Industrial Plants.

Another important feature of the Institute convention which contributed largely to its value was in the place of meeting. Held as it was in an industrial center where so large a proportion of the materials used in the construction of the modern building are produced, it was wise in the directors to arrange so that a liberal amount of time should be given up to sightseeing. The three great factors in our modern construction which demands the smallest limit of construction space, the greatest amount of light and the most perfect sanitary provisions, were found in the steel mills, the plate-glass works, and the sanitary, electrical and ventilating manufactories visited. It can not be done every year, but it need not if those who attended the convention and those who read its proceedings will from day to day draw from the store of knowledge and experience there placed before them. In fact, the whole tenor of the convention was emphatically in the direction of education and the elevation of architectural practice, and in this respect the thirty-third annual meeting of the Institute was the most notable in its history.

ARCHITECTURE, THE SISTER ARTS, AND ARTISTIC TRADES.*

IT is well known to the profession that when an architect has an especially strong propensity for hard work, there are abundant opportunities to fully occupy his time with studies and researches, so as to be prepared for future tasks, even though he be not favored with the orders of impatient clients. But when the boards are all covered and new commissions are being frequently offered, and this continued for a considerable period of time, then he has to exercise his patience to do the thinking for, and relieve from responsibility, the many people who are constantly pressing from one end to the other of the long days of the week. It is then that others besides the craft realize that such an architect is a very busy man. If God has blessed him with a beautiful temper, and a cuticle of sufficient thickness, he can, perhaps, manage, with an occasional trip to Europe or a short rest in an insane retreat, to weather the storm through the allotted years till a place in heaven is prepared for him. But if nature, or lack of self-restraint, has bestowed a contrary disposition, then the chances are that the worries of the calling will make necessary the visits to the retreat of more frequent occurrence and longer duration.

The effort in this paper is not alone to point out the way of avoiding the life of a State ward in a benevolent institution, nor even to advise architects as to the conduct of their business, but rather to make a few suggestions, tending to a better enjoyment of daily pursuits, if followed out, and enabling the designer or head of a building enterprise to more fully conduct the different classes of art work that are too commonly left almost entirely to outside artists and workmen.

It is unquestionably true that any one who is capable of making an architectural design of high order has the taste and brains qualifying him to perform any kind of art work co-relative to architecture, provided he has the requisite material to aid him and the courage to make the attempt. How evident it must be that the author of a noble work will have more pride in his masterpiece if he can be assured of harmony in all of the decorative accessories that contribute to the completed structure. It is equally manifest that it must be mortifying to an architect of esthetic temperament, as he inspects these different classes of work, being carried out for him, perhaps, by artisans with different ideas of design and technic, to discover that he can never be wholly satisfied, and, in some cases, that he can never enter the building without being struck with what, to him, is a glaring defect.

In some instances he feels his lack of ability to criticise as the work progresses, although he is aware that there is something lacking, but is not sufficiently confident that he can suggest the proper change, so he reluctantly submits and is never fully satisfied with the result.

If, though, he has made a careful study and has practically applied himself to the different branches of art work of which he is so fond, he naturally detects at a glance any imperfection in design or workmanship and fearlessly directs the desired change.

Almost every architect's library is replete with sculptural designs, works on figurative composition, allegorical and emblematic, as well as all kinds of decorative designs, and they should be just as valuable to the owners as similar books are to the art workman. With such ready assistance at his command he can work out his own models or designs more closely to his ideals than he can by imparting his wishes to others.

If it so happens that the work engaged upon is of a public character, under the general care of a committee or board of construction, and the architect has ready for their inspection sketch models of the sculpture and elaborate designs of the other decorative work, with perhaps small sections practically executed, the chances are that they will be adopted at once; otherwise they will take it for granted that he is not up to the standard in these specialties, and will call for competitive designs. Awards will be made to one party for the sculpture, or perhaps for a portion of it, and to other sculptors for other parts. Other parties will be selected for the fresco work, and still others for the mosaics, while the carving, stained glass, etc., will be distributed around to art workmen with widely differing tastes and inclinations. Possibly the architect may have some control over the artists, and be able to persuade them to modify their designs so as to harmonize with the general scheme. But alas! how often have we seen these attempts at persuasion fail. Particularly in monumental work have we noticed bickerings between the architects and artists, and the appeals of the former to the supervisory board do not always avail, for such committees usually hesitate to interfere with contracts when the questions at issue are mere matters of taste. Is it not conclusively demonstrated that there is a decided advantage in having all of the art work which assists in beautifying architecture emanate from one head?

Many creditable results have been attained by architects selecting artists to work with them jointly in preparing and executing designs, but oftentimes, through the delicacy of friendship, they defer to each other's superior judgment in their special branches of work, and the outcome is not exactly what the architect would have attained had he been equally trained in the other specialties.

There are artists that may take the position that we would be interfering in their territory; that it would be a breach of etiquette to make their efforts subordinate; but we have a right to stand on high ground, and claim the honor of being artists as well, with the sole aim of avoiding an inharmonious condition in all parts that unite in making a beautifully appointed building.

There comes at once the plea from many of our profession that they do not have time to look after so many details, and that it would be impossible for them to dabble with their own hands in mud, or transform their offices into workshops; but the obstacles to such a course are magnified, and to a great extent imaginary, for it is not suggested that work which would require such transformation be carried on in the office. The few divisions of art work which will be recommended in order are not of a character to cause much litter, or in any other way interfere with a properly conducted office. Modeling with clay or wax is, perhaps, the most useful art work, next to drawing, that can be introduced, and its advantage gradually grows as time shows in how many ways it can be helpful. It is well known that an architectural designer can not talk long upon any subject without whipping out his pencil with which to illustrate more forcibly than he can by words the subject in hand. In the same way he falls into the habit of dropping his pencil and substituting clay as a means to more clearly express his ideas. A tight wine barrel or box lined with zinc will hold all the clay needed for ordinary sketch modeling, and will occupy but a small place in your closet. For such small work, a clay obtained from the potteries of Somerset, Massachusetts, or some other of like quality is preferable, while for large work a clay containing more loam, from Perth Amboy potteries, which takes up more water and does not require such frequent sprinkling, is sought for. The clay comes prepared ready for use, is inexpensive, and the freight charges are trifling in amount. Modeling tools can be purchased in any of the stores where artists' materials are sold. When everything is ready and the character of the model determined upon, the first sensible thing to do is to pull on a pair of painter's overalls, a time-saving way of avoiding soiled clothes.

Skeleton forms can be improvised or purchased. And now good luck to the embryo sculptor! There are times when modeling wax serves a good purpose, and has the advantage of not requiring the attention that clay does to keep it from cracking, either by sprinkling or draping with wet cloths. It does not work as freely nor produce as good results as can be obtained with clay, but when its use seems to be desired, the slight stickiness can be overcome by lightly moistening the fingers, tools or brushes with coal oil.

It will be a fortunate circumstance if there is a room or corner in the office where a plaster cast can be made from the model, but if the litter would be objectionable, the plaster man can carry the model to his shop and return the clay with the cast. If large work is contemplated, or in case of statuary, if of life-size or larger, it is better to provide a special studio than to undertake it in the office.

It may seem presumptuous to dwell on minor details that are patent to almost every one, but in trying to make converts to this new department for the architect's office it is perhaps well to have answers ready for some of the objections that may arise, for the aim is to show that the introduction of modeling will greatly facilitate our work, and after it has become established as one of the fixtures it will be found to be a source of pleasure. Without doubt, many of you will become so infatuated with the charm of development of the creative form that you will to a greater extent than ever become oblivious to the passing of time, forget that you have a stomach, and will work and work, till aroused by some one coming in and exclaiming, "Well! don't you ever eat?" You will soon get in the way of having your lunch brought in so as to save time, and you will wonder at the enthusiasm you have for this new branch of your occupation. You will be gratified to see how much better your architectural detail looks when executed from your models. One decided advantage is to have sections of details for molds or ornaments placed at elevated points while still in plastic form, to ascertain, before the plaster casts are made, if changes are desirable.

Undercutting and shadows can in this manner be studied with much better results than with drawings. Critical clients can in this way be satisfied with very much less trouble as to the appearance that certain details or ornament will have when executed.

If the interest in modeling should so grow upon the architect as to make him ambitious to try his hand at statuary or portrait sculpture for monumental work, it will be better, as before stated, to provide a special place, with skylight and curtains; and if practical, to have a section of the floor removed, so that from the basement a view can be had; or an observation pit purposely built. This advantage can hardly be described until one experiences the difference in appearance of the work from this point and the one on the scaffold or step-ladder. Special provision should be made for an extra amount of heat for winter weather, for the model, who is an indispensable adjunct to the studio, can not be comfortable in the same degrees of temperature that are pleasant to those who are comfortably draped.

The next class of art work that should receive more attention from architects is fresco decoration. It is seldom that we find a fresco artist that has made a careful study of architectural design, and only a few are proficient in figure composition. Occasionally one has had some experience in theatrical scene painting, and has gathered some fair ideas of perspective, but they are wofully deficient in pure architectural detail. The prevailing styles with the

*Paper read by Levi T. Scofield, of Cleveland, Ohio, at the thirty-third annual convention of the American Institute of Architects, held at Pittsburg, Pennsylvania, November 13-16, 1899.

fresco artists of our country seem to incline more to scroll-work, wreaths, festoons and floral designs. Such drawings are easily prepared, and the practical work quickly executed, making considerable display for the amount of labor bestowed, but they are usually meaningless, and become quite tedious in their monotony. It is well known that the neat sketches made by clever artists with their chinese-white tints do not always work out so well on the walls and ceilings, while designs made in the architect's office, although not so effective in the sketch studies, develop wonderfully when carefully executed by artists. It is not practical for the architect to personally do more than prepare the sketches to a scale, nor is it necessary, for the artists are skilful in execution and are only lacking in the technical knowledge required. Unless one is practically and almost daily engaged on the scaffold, especially on ceilings, the work is quite irksome, and will tend to try one's patience, for neck, chest and back muscles are called into play that are unusual to the architect, which sometimes require weeks of seasoning before the attitude seems natural. There will be times, though, when the designer's interest in some special detail will tempt him to strip off his coat and mount the trestles to practically explain to the artist how he wishes it done. He will be interested, too, in determining the general tone of color, to see that it harmonizes with the finish of the apartment, whether it be wood, marble or bronze. But to do more than carefully prepare the designs and superintend their execution, with occasional suggestions practically made by the architect's own hand, seems to be unnecessary.

Another interesting art work which can be conveniently executed by architects is mosaic of the Venetian and Roman patterns, either for floors, walls or ceilings. The Venetian mosaic is made of marble of many different colors, and the material for same is furnished to the trade principally from shops located in Italy and France. It is usually prepared in cubes from one-half to seven-eighths inch square. The sizes most commonly used in floors are five-eighths and three-fourths inch square. The former is preferable for smaller apartments or corridors.

The slabs are sawed from the blocks in thicknesses from three-eighths to three-fourths of one inch; these are placed in a machine and broken into strips, which are in turn broken into squares. For floors that will be subjected to only moderate wear, and also for walls and ceilings, the cubes may be split with a sharp-edged tool of hard steel, thus making two pieces, each with a smooth face.

Very beautiful interlacing patterns in Arabic, Russian and Celtic styles, Greek bands and panels, also scrolls of every description, can be made of the squares, and the labor is so simple that it does not take much more time for practical execution than it does to prepare the working drawings. If the pattern, though, is more elaborate and made up principally of curved lines, it would be advisable to employ an Italian to assist who is skilled in the use of the cutting tool or mosaic hammer. By long practice they become so proficient that they can cut to the line without an apparent effort and with a boldness that will make a nervous person cringe to watch the operation. The tool is short-handled and similar to that used by pressed-brick layers. The marble, held by thumb and finger, rests on a piece of soft iron which does not seem to mar the edge of the tool when it comes in contact. If your independence should prompt you to do your own cutting, you must be prepared to hear an occasional "ouch" escape your lips, or if it is possible that the precepts of your early Sunday-school days have been forgotten, it may be that some of your adjectives or exclamations may startle or even shock by their forcible expression those who happen to be in your presence. But court plaster or Peleg White salve will cover many defects, and you will have the satisfaction of knowing that the work is all yours, even if some little scraps of fingers are missing. After your working drawing is completed reversely, and tinted or marked with a colored pencil on paper especially prepared for strength, and of a texture that will readily adhere to mucilage, you apply with a brush gum arabic, or what is very much cheaper, dextrin with a small proportion of animal glue. You then lay on your pieces of colored marble to the spaces on the paper of corresponding shape, size and color.

Another branch of this work which the architect may as well turn over to the practical workman is the bedding, leveling and rubbing. It is tedious, difficult and dirty. A stiff bed of Portland cement is prepared and over this a thin, soft bed of the same is spread, on which the mosaic pattern is laid. The moisture soon loosens the paper, and the upper face is brought to a true surface by deftly tapping with a smooth block of wood. Rubbing, polishing and cleaning completes the work, after which a small quantity of coal oil or linseed oil applied with a cloth will bring out the bright colors of the marble. For Venetian work in walls and ceilings the rough surface of the marble is exposed, giving a softer and more delicate appearance. There is nothing in the way of mural decoration that can excel in beauty or hardly compare with the well-executed superfices of a vaulted ceiling where the combinations of color have been artistically treated, in selecting the marble. The bedding in walls and ceilings is done in a similar way to floor-work, only there is more difficulty in holding it in position until it is thoroughly cemented. Designs for vestibules, fireplace hearths, and emblematic panels for other parts of floors can be made and executed on a common drawing-board, in a corner of the office, without in any way disturbing those at other tables. It is preferable to lay it out in sections of a size that can be easily handled and with side lines jogged in such a way as to be matched more easily in laying.

Roman mosaic is an extremely interesting kind of art work that can be executed in the office or during the leisure hours in your working den at home. It is used more for pictorial, allegorical, or emblematic work, and the possibilities are unlimited for the most exquisite decoration. The material comes in long stems of opaque glass called smalts, or it can be obtained in tesseræ broken to the lengths desired. There are many thousands of different shades of color, so that any effect can be produced that is possible with either oil or water-color. The smalts can be obtained in cross-sections of triangular or quarter-round shape, but if a tessera has to be slightly beveled in working out a design, it can be better done on a small revolving grindstone than by cutting, as the latter process is more difficult than with marble. This work requires considerable time and patience, and can only be recommended as an occasional break from the worrisome routine of business; but the results are so gratifying that the attempt is fully justified.

The most pleasurable and fascinating work that can occupy the time of the architect, next to modeling, is what is commonly called stained glass, or, more specifically, a combination of opalescent or other colored glass, in mosaic patterns, with grooved lead. The ingenuity displayed by the manufacturers of opalescent glass, in producing such beautiful harmony in colors, and such wonderful shading, mottling, and variegation of tints in the same colors, has made it possible for designers to bring out almost any result or fancy desirable; and one can sit before his easel where the samples are displayed and fairly revel in anticipation of what can be done in beautiful effects of clouded sky, flashes of sunlight, masses of foliage, and splendid drapery. This achievement in the formation of the glass is not accidental, but the workmen are artists, and they specially keep in view the purpose of the designer as they apply the metallic oxides that produce the colors, and the manipulation of the semi-molten sheets as they form the delicate corrugations, waves, folds, and lines that are so useful in the accomplishment of good work. Grinding is sometimes resorted to when lights are wanted that can not otherwise be obtained. Heating thick pieces of dark color over a lamp and stretching it while slightly sagging will give soft lights for drapery. Nearly all of the opalescent glass for illuminating is made in this country, and our artists perhaps excel all others, throughout the world, in modern examples of opalescent mosaic windows. The glass is not expensive; some of the colors which are made with cheap materials can be bought for 10 cents a pound; where silver is used, 20 cents; and gold, 30 cents. When it is specially made for drapery or some other particular kind of work which calls for additional labor, it will sometimes cost from 60 to 70 cents. Thin glass weighs about one pound to the square foot, while the heavier, laminated sheets will weigh from two to two and one-half pounds.

Nearly every architect has watched the operation of making leaded glass, but for the information of those who may sometime be tempted to try their skill at practical work a brief description of the detail may be of assistance. After the preliminary study has been made, it would be well, for the first trial, to make a colored full-size drawing, marking it off into subdivisions, with a view to simplicity in cutting, avoiding, as much as possible, internal angles. This drawing should be made in duplicate by placing underneath a sheet of detail paper, with a layer of transfer paper, made of carbon or lampblack, between. Every piece of glass should have its special number. A hard pencil should be used so that every line and number will be transferred. The duplicate drawing is cut in sections by shears having three blades, two on one handle and the other passing between, making two cuts and removing a strip about one-sixteenth of an inch wide, or about the thickness of the web of the lead bar. After the colored glass is compared with the tinted drawing, the cut paper of corresponding number is placed thereon. But do not attempt the glass-cutting unless you are blessed with boundless patience, for professional cutters can be employed at reasonable rates, and with their little beveled wheels of hard steel they can do with comparative ease what to you, it is feared, would be a discouraging labor. The opalescent glass is much harder than any other, and on it better progress can be made with the revolving cutters than with the diamond. The glazing is interesting work; it is not difficult, and will be executed on the original working drawing, which will be tacked to the drawing-board. The grooved lead is made through a die to all sizes, from three-sixteenths for single glass to any depth required where two or three thicknesses of glass may be used to get the color sought for. As the pieces of glass, which are numbered with pen and ink to correspond with drawing, are worked into the design, they are, together with the lead, held in place by large carpet-tacks pushed through the drawing into the board. Previous to soldering, the beveled intersections of the lead are touched lightly with oleic acid or palm oil, applied with a brush. The glazing is made water-tight by a soft black putty being smeared over the entire face of the glass with a stubbed brush, thoroughly filling every little space between the apposed lead and glass. The surface is then cleaned, first with sawdust and finally with whiting. The appearance of the lead and soldering is sometimes improved with a coat of copper bronze or aluminum.

There are other artistic trades, such as wood-carving, stone-carving, hammered iron, etc., that architects could profitably, on occasions, work at with their own hands, but it is well understood that they would not seek the opportunity very often, because of the pressure of other duties. Still it would increase their interest in these branches to such an extent that the added enjoyment of

their occupation would be a revelation to them. But the advantage, already referred to, which would be derived by the architect in his daily inspection and supervision of work, by this personal experience, can hardly be conceived, and is beyond the range of this paper to describe.

Everything about a building would have a new interest. What before was appreciated, because of its general good appearance, would now be scrutinized for its clean-cut and artistic qualities. You would see everything with new eyes, as one who is near-sighted or suffering with astigmatism does when first fitted to scientific eye-glasses.

Try for your own sakes and your families to thus make a diversion from routine work, and get some rest and recreation for your flagging nervous systems. Twenty or thirty years of comfort and happiness will be added to your lives, and in the years of mellow old age, when the call is sounded, your friends will have the satisfaction of seeing you die at home and not in a public institution.

THIRTY-THIRD ANNUAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE thirty-third annual convention of the American Institute of Architects was held at Pittsburg, Pennsylvania, on November 13-16, 1899. The gathering was large in representative attendance and important because of the educational trend of the proceedings. Little time was occupied in routine work, the three sessions of each day being devoted to the reading and discussion of papers, in visiting the many manufacturing establishments at the invitation of the owners, and inspecting the various processes by which materials used in building construction are made. These visits being largely illustrative of papers read and of immense value as object lessons, they are noted in the same relation to the convention as the papers read.

On the first day the meeting of the board of directors occupied the morning and evening sessions. The afternoon was devoted to a visit to the works of the Standard Manufacturing Company, where making the many varieties of sanitary appliances was inspected. The trip down the river was by steamer, and on the return trip a luncheon was served on the boat.

On the second day the first session of the convention proper was held. The meeting was called to order by President Henry Van Brunt, of Kansas City; Glen Brown, of Washington, secretary. The following were present:

DELEGATES AT THE THIRTY-THIRD ANNUAL CONVENTION.

Delegates ex Officio.—Henry Van Brunt, Kansas City, Mo.; W. L. B. Jenney, Chicago, Ill.; J. W. McLaughlin, Cincinnati, Ohio; Glenn Brown, Washington, D. C.

New York Chapter.—H. R. Marshall, A. L. Brockway, R. W. Gibson, E. H. Kendall, New York city.

Philadelphia Chapter.—William C. Prickett, Jr., Amos J. Boyden, Philadelphia, Pennsylvania.

Illinois Chapter.—Normand S. Patton, S. A. Treat, Charles S. Frost, George Beaumont, H. W. Hill, Chicago, Illinois.

Boston Chapter.—R. D. Andrews, H. L. Warren, A. G. Everett, William G. Preston, Boston, Massachusetts.

Cincinnati Chapter.—James W. McLaughlin, George W. Rapp, Gustav W. Drach, Cincinnati, Ohio.

Rhode Island Chapter.—Alfred Stone, E. I. Nickerson, Providence, Rhode Island.

San Francisco Chapter.—No delegate.

Indianapolis Chapter.—C. A. Wallingford, Herbert W. Foltz, Indianapolis, Indiana.

Washington (D. C.) Chapter.—James G. Hill, Joseph C. Hornblower, Robert Stead, William M. Poindexter, Washington, D. C.

Michigan Chapter.—George D. Mason, R. E. Raseman, Detroit, Michigan.

Central New York Chapter.—Frederick H. Gouge, J. Foster Warner, J. H. Pierce.

Buffalo Chapter.—E. S. Green, Buffalo, New York.

St. Louis Chapter.—W. S. Ittner, Louis Mullgardt, J. L. Mauran, A. F. Rosenheim, St. Louis, Missouri.

Kansas City Chapter.—No delegate.

Cleveland Chapter.—Charles W. Hopkinson, Cleveland, Ohio.

Pittsburg Chapter.—George S. Orth, Thomas Boyd, Edward Stotz, Pittsburg, Pennsylvania.

Worcester Chapter.—No delegate.

Minnesota Chapter.—No delegate.

Colorado Chapter.—Robert S. Roeschlaub, Denver, Colorado.

Brooklyn Chapter.—Louis De Coppet Burg, A. G. Thompson, J. G. Glover, Brooklyn, New York.

Dayton (Ohio) Chapter.—Robert E. Dexter.

Chapter at Large.—Charles F. Schweinfurth, Cleveland, Ohio; M. S. Mahurin, Fort Wayne, Ind.; F. O. Weary, Akron, Ohio; G. A. Frederick, Baltimore, Md.; Henry Ives Cobb, Washington, D. C.; W. H. Conway, Springfield, Ill.; Cass Gilbert, New York, Jeremiah O'Rourke, Newark, N. J.

MEMBERS PRESENT WHO WERE NOT DELEGATES.

W. S. Eames, T. C. Young, St. Louis, Mo.; Jacob Agne, J. E. Allison, J. E. Kairn, John M. Alston, H. D. Gilchrist, G. M. Barthberger, Pittsburg, Pa.; L. Boucherle, C. F. Owsley, Youngstown, Ohio; W. B. Mundie, J. E. McCarty, Chicago, Ill.; Charles E. Taylor, Cincinnati, Ohio; William R. Ware, Julius Kastner, New York city; H. H. Bickford, Elmira, N. Y.; Frank Miles Day, George C. Mason, Philadelphia, Pa.; George H. Helme, Springfield, Ohio; Guy Kirkham, Springfield, Mass.; John H. Coxhead, Buffalo, N. Y.; Benjamin S. Hubbell, Levi T. Scofield, Cleveland, Ohio; H. J. Meier, J. S. Rogers, Detroit, Mich.; C. H. Blackall, Boston, Mass.; T. L. Packard, J. W. Yost, Columbus, Ohio; G. O. Totten, Washington, D. C.; C. C. Thayer, New Castle, Pa.

Representatives of Architectural Periodicals.—William Rotch Ware, Boston, Mass.; Robert Craik McLean, Chicago, Ill.; Henry C. Meyer, M. A. Baker, New York city; H. D. Bates, Boston, Mass.; E. C. Kelley, Cleveland, Ohio.; R. H. Vail, Chicago, Ill.

Non-members Who Read Papers.—William Ordway Partridge, Elmer E. Garnsey, New York.

After an address of welcome by Mayor William J. Diehl, of Pittsburg, the president delivered the following address:

PRESIDENT'S ADDRESS.

It is my province and my privilege to welcome you to this thirty-third annual convention of the American Institute of Architects, to congratulate you on the national prosperity and progress which it is your high function to symbolize in works of architecture; to refer briefly to the main incidents in the history of American architecture during the past year; and more especially to point out how the work which we are organized to perform may be more effectually carried out, and how the beneficent influence of the Institute may be more widely extended.

If architecture during the past year has made a sufficiently definite advance in structural ingenuity or artistic beauty and fitness to be noted in the official review which it is my duty to lay before you—if in this interval it has earned and is receiving from the public and the nation a more intelligent and appreciative recognition as a fine art, we may justly attribute these results to two causes: first, to the American Institute of Architects, through the cordial affiliations of its members and its organized and persistent efforts during the more than fifty years of its existence; and, second, to the schools of architecture, which are now considered so essential to the generous culture of the youth of our country that they form a part of the systems of technical instruction in many of the principal institutions of learning in the United States. The splendid hospitality of the École des Beaux-Arts is no longer essential to the complete equipment of the American architects. During the past year the results of the special training obtained in our own schools have become very evident. The graduates are beginning to make good their place in the ranks of the profession, and the older members find that they are stimulated by a fine emulation of new blood and fresh inspiration. Almost daily new names become prominent, and new reputations are beginning to struggle with old for preëminence. The impulse of this new and healthy dispensation is already felt in the remotest part of the country, and the vulgar architectural vernacular which has there prevailed is giving place to coherent and disciplined style.

The Institute should take immediate measures to refresh itself from this influx of new and abounding life. It is most evident that these two powerful influences, the Institute and the schools, which are thus working for the advancement of architecture, should work, not apart in rivalry, but together in closer and more effective coöperation than heretofore.

To this end, I venture to suggest that, by a single amendment of the By-Laws, the Committee on Education should include, ex officio, all those professors and instructors of the architectural schools who are members of the Institute, and, if there are any who are not members, that they should be brought within our fold, so that this committee may act not only as a bond of union between the Institute and the schools, but between the schools themselves; that the annual report of the committee should embrace a general statement of the work and methods of the schools, the number of pupils enrolled, and the names of those especially distinguished; and that the practical interest of the Institute in the welfare of the students should be made evident to them by the establishment of a system of Institute prizes, and, if possible, of one or more traveling scholarships, open to the students of all the schools.

There are nearly five thousand persons practicing as architects in this country, and it can not be denied that the professional practice and standing of this large body of men is made more secure, more honorable, more respected, and more remunerative by the fact that one-tenth of their number is organized and united in a national Institute, which for many years has labored successfully to promote the artistic, scientific and practical efficiency of the profession. It is true that the influence of the Institute is in proportion rather to the wisdom than the number of its members. It is no less true that the Institute is organized for a far larger and a far more widely distributed membership than it at present enjoys, and that, until it has such a national membership, it can not have its full and proper effect as an instrument for the advancement of our profession, and can not adequately represent its dignity before the world.

The question how our strength and resources can be best enlarged is therefore of the first importance. The men whom the Institute most needs are the men who most need the Institute. A late earnest appeal to the Chapters has in several localities been fruitful in securing many valuable members, as will be explained in the report of the board of directors. The Kansas City Chapter has been rehabilitated and will be restored to full affiliation with the Institute under the new By-Laws. But the strengthening of the Institute requires measures much more far-reaching. We need new Chapters in every part of our wide domain, and, within them, more members, and a much more active and efficient adjustment of their machinery to the needs of young men. No effort should be spared by the Chapters to make their meetings so attractive and so essential to the younger men that the necessity for the existence of junior societies and leagues in their neighborhood would be less apparent, and there should be no occasion for rivalry. The Institute should be especially hospitable to the graduates of the schools, and I am persuaded that, if the connection between the schools and the Institute should be established on some such basis of mutual interest as has been outlined, the professors would

prove the most effective recruiting agents, and that their pupils on graduation would be made to consider that junior membership in a Chapter of the Institute is essential to their proper and regular advancement in the profession and a necessary preliminary step in their career as architects. The Institute should not only be the guardian of professional purity and dignity in practice, should not only advance the interests of our art and act as the fountain of professional honor, but should aim to secure a more effective unity of effort between old and young, so as to inspire our work with the strenuous spirit of our national life, and in this service to make our art distinctively stronger, truer and more beautiful. Therefore, the Institute needs in its membership not only the wisdom of age and experience, but the enthusiasm and zeal of youth if it would keep in closer touch with the most healthy aspirations of the profession and avoid becoming the slave of its own traditions. To this end the junior members of the Chapters, recruited from draftsmen and graduates of the schools, should be made to feel that they are wards of the Institute and essential parts of its organization, and to anticipate their advancement in due time to the successive grades of Associate Membership and full Fellowship as assurances of honorable professional positions before the world. It seems to me that the Institute, under its present improved organization, would, by some such process as I have suggested, be brought into closer and more effective sympathy with the young men just entering the profession, and through such sympathy would receive at least as many benefits and advantages as it would confer.

I commend these propositions to your careful consideration; and would further propose that the board of directors be requested to examine into the work and methods of the most successful of the junior architectural societies or leagues with the object of formulating from their experience a scheme of exercises and duties to be recommended in a circular to the Chapters, so that they may learn how to give greater interest and a more abundant life to their proceedings, and become more active and efficient agents in the practical work which this Institute is organized to perform. Thus may be established a propaganda in the interests of a warmer comradeship, a purer practice, and a nobler art.

In considering what has been actually accomplished by our efforts during the past year, it is with especial pleasure that I refer to the fact that, under the operations of the Tarsney Act, public buildings at Norfolk, Virginia, Camden, New Jersey, and Ellis Island, New York city, are now erecting from the designs and under the care of private architects; that the new Customhouse in New York and the Judiciary building in Washington have, after fair competition, been assigned to architects capable of expressing the genius of the nation in monumental architecture; and that the Baltimore Customhouse and the national buildings at Cleveland, Ohio, will probably soon be the subjects of competitive design. The work on the buildings for the naval academy at Annapolis and on the Government building at Chicago is in the hands of private architects. It is probable that other public monuments, especially in the West, will be open to the profession as soon as the sites shall have been vested in the United States. The office of the Supervising Architect at Washington is thus gratefully relieved from a labor which no individual genius, however strong, and no official organization, however skilful, can be sufficient adequately to perform. But while the efforts of the Institute have thus far succeeded in opening to fair and honorable competition the designing and building of the national monuments. and have made an encouraging beginning in rendering them more worthy to represent our higher civilization in terms of art, it must not be forgotten that these opportunities have been opened to us only through the intelligent sympathy of the present honorable Secretary of the Treasury, operating under the provisions of the Tarsney act; and that, without the accident of this intelligent and exceptional sympathy on the part of that official, the public buildings of our country would still be manufactured by the architectural machine in the Treasury Department, with its subdivided professional responsibilities, its baleful political affiliations, and its deliberate and extravagant methods of administration. Our attempt to formulate and obtain the enactment of a law sufficient to secure for us a truly national architecture, fit to represent our highest standards in art, should not for a moment be relaxed, and our legislative committee on government architecture should be continued, maintained and encouraged to use every honorable means to bring about this result at the earliest possible day.

I am glad to bear witness to the fact that, in the conduct of competitions in general, the dignity and the highest interests of our profession have during the past year received more adequate and respectful consideration than heretofore. But it must be admitted that in many parts of our country, especially in those more remote from the great centers of activity and intelligence, the loose professional habits of many practitioners of our art still encourage the publication of "Invitations to Architects," which competitions, in which the contestants are arbitrarily deprived of every proper safeguard and are asked to submit themselves to conditions insulting to their self-respect and devised to secure their service at the smallest possible cost, meet with ready and humiliating acceptance. Near every such locality the Institute should maintain a missionary Chapter to teach the primary principles of honorable practice, for the benefit, not of the architects alone, but of the public.

Among the competitions of the year which have been managed in a manner creditable to the projectors, the contestants and the judges, by far the most conspicuous and memorable is that for the laying out of the buildings and grounds of the University of California, under the "Phœbe Hearst Architectural Plan." Though the highest award in this international competition fell to a French architect, the brilliant part borne especially by some of the younger American contestants is a cause for congratulations. I should like to see this Institute by formal resolution recognize our indebtedness not only to the munificent and public-spirited woman through whom this important architectural event was made possible, but to the managing committee for furnishing an example so conspicuous of a fairly conducted competition on a great scale, and for the courage and intelligence with which they have conceived a scheme of architecture which in extent and importance has not been exceeded, if it has been equaled, in modern times.

Another cause for congratulation resides in the cordial and effective alliance between painting, sculpture and architecture, as exhibited in several works of monumental importance which have reached completion during the past year. It is only by such harmonious and fruitful coöperation that the highest civilization of our times may at length begin to receive competent expressions in art. The public is beginning to understand that the highest and noblest expressions of art, not only in permanent monuments, but in public pageants of merely temporary significance, are possible only through such a concert of effort, and architecture is glad to restore to her sisters of the brush and chisel the field of high endeavor in which the old masters found their greatest opportunities. We especially recognize and admire the splendid service rendered by the sculptors in the decoration of the triumphal arch erected in New York in honor of the Navy and the victor of Manila.

I have looked forward, gentlemen of the Institute, with especial solicitude and interest to this, your thirty-third convention, as it is the first in which, under our finally amended laws, the experiment of authorized delegations from the Chapters is to be tried; the first in which the remodeling of the Constitution and By-Laws has not presented itself as the paramount and absorbing topic of report and discussion; and practically the first in which the Institute has given to it the privilege and opportunity of considering, at peace and without fear of interruption, subjects related to the highest interests of the profession.

If, after these many years of experiment, we have at length reached an era of tranquil and prosperous development, let us realize that the best use we can make of this peace is to comprehend and to assume all the grave responsibilities which belong to the undisputed position of the Institute as the national representative and protector of a great profession and a greater art.

You may be sure that the civilized world will receive with peculiar interest all that we have to give forth in the elucidations of the strange and unprecedented conditions under which a rich and prosperous nation, unembarrassed by patriotic traditions of art, is developing style; that it will eagerly hear all that we may have to say on the practical applications of science to architecture, on the progress of invention in respect to building, on the discovery of new materials and new methods and their effect upon our art, and on the incidents of our unimaginable progress in the future. We alone are in position to influence the expression of the immense energies of our nation in architecture. Let us endeavor adequately to fulfill these duties.

I hope I may be permitted to close the address with a brief personal statement. When, at the last convention, you saw fit to make me president of the Institute, I received the unexpected honor as an expression of consideration and respect for one whose connection with the Institute began at its first conception, forty-seven years ago. Recalling the brilliant services of my old friends and predecessors in this office, I undertook its responsibilities with doubt and sincere misgivings. But as the culmination of a professional year is now, in the course of nature, drawing toward its close, and as a more precious testimonial of the good will and kindly feeling of my professional fellows, the honor was very grateful to me, and I now resign it with a deep appreciation of your generous confidence. If, possibly, it may be the purpose of my friends to propose my name for an election to a second term, as permitted by the By-Laws, and as customary in your practice, I must, with gratitude, decline the compliment, as I have in contemplation a long visit of study and observation in Europe.

I sincerely trust that in choosing my successor you may be wisely guided, and that he will receive the office with the consciousness that its responsibilities have increased, and are increasing with time, and that a merely perfunctory administration of it will delay the development of the great future of the Institute.

The following report of the Board of Directors was read by the secretary:

REPORT OF THE BOARD OF DIRECTORS.

The Board of Directors, elected at the convention held in Washington, D. C., November 1, 2 and 3, 1898, held their first meeting at the Octagon, January 5, 1899. The Executive and Judiciary Committees were elected by the Board of Directors, and the president appointed the standing committees for the year 1899, as published in the last proceedings.

Forty-four new members have been elected during the year, and twenty applications are now pending.

Two Fellows of the American Institute of Architects have died since the last convention.

Mr. William Crawford Smith was born November 26, 1837. He served with distinction in the Confederate Army. After the Civil War he resumed the practice of architecture in Nashville, where he took a high standing professionally, socially, and as a man. He was prominently connected with the Nashville Exposition, designing the reproduction of the Parthenon. Mr. Smith joined the Institute in 1881. He was elected a member of the Board of Directors of the Institute in 1892-1896, and again in 1898. (In 1895 he was elected second vice-president.) He had endeared himself to all members of the profession with whom he came in contact, by his courtesy, high sense of honor, and genial manners. At the breaking out of the Spanish-American War, he was made a Colonel of Volunteers in a Tennessee regiment, and was on his way to Manila at the time of his last election as a director of the Institute. He died from an attack of apoplexy while at the head of his command on the firing line, February 5, 1899.

Mr. John R. Church, of Rochester, New York, who joined the Institute in 1888, died February 7, 1899, being in his forty-fourth year. Mr. Church was in active practice for many years in Rochester, designing the new Auditorium and the Central Presbyterian church of that city.

Mr. Hackney, of Kansas City, Missouri, who was elected an Associate Member in June, 1899, died May 25, 1899, while his application was pending.

The location of the permanent headquarters of the Institute in the Octagon House gives room and opportunity for a collection of material that may be valuable in the future history of the Institute, and of the profession of architecture in this country.

The Institute has received oil portraits of William Thornton, Benjamin H. Latrobe, large photographs of Thomas U. Walter and Edward Clark, all of whom were architects of the United States Capitol, presented by Mr. Edward Clark; an oil portrait of Mr. Richard Upjohn, presented by his daughter, Mrs. Charles Babcock, and a model of the Hunt Memorial, presented by Mr. Bruce Price, who has also donated a sufficient amount to put the model in repair. Drawings of Patent Office Extension and German Parliament building have been presented by Mr. Adolf Cluss, and one hundred photographs of the old Capitol building presented by Mr. Glenn Brown.

The exchange list of the Institute has been small; the Royal Institute of British Architects and the American Society of Civil Engineers being the only associations which have sent their publications in exchange with regularity. Correspondence with American and foreign societies, of which the secretary could obtain information, and with periodicals relating to architecture and allied subjects, has resulted in obtaining agreements to exchange publications with the Hellenic Polytechnical Society, Athens, Greece; Royal Commission of Art and Archæology, Brussels, Belgium; Society of Berlin Architects, Berlin, Germany; Society of Engineers and Architects, Vienna; Society of Italian Engineers and Architects, Rome, Italy; Architectural Association of Berlin, Berlin; Swedish Society of Architects and Engineers, Stockholm; Society for

the Propagation of Architecture, Amsterdam; Society of Japanese Architects, Tokio, Japan; Royal Society of Architects, Antwerp; Architectural and Social Society, Amsterdam, and eleven of the architectural clubs and similar societies in the United States.

Sixteen periodicals have agreed to exchange with the American Institute of Architects.

A complete list of books, pamphlets, periodicals and society exchanges will be given in the report of the House and Library Committee.

The Institute has received forty three books, consisting of sixty-three volumes.

Pamphlets on forty-two subjects, consisting of 108 volumes, 16 periodicals, containing 259 numbers, 41 society publications, containing 180 numbers—total, 142 volumes or numbers.

In the future the Board of Directors think it desirable to publish a quarterly bulletin, giving an index of the periodicals and society literature which is received in the way of exchange; and in the same bulletin to give the titles, size and contents, with a short review of current books on architecture and allied arts.

The repairs on the Octagon House, which were not completed when the convention was held in Washington, November 1, 2 and 3, 1898, have been completed by the committee in charge at that time and the House Committee, which took charge of the Octagon after January 1, 1899.

The repairs have consisted in a thorough cleaning and painting of all the walls, ceilings and woodwork in the halls and the principal rooms on the first floor, together with the offices of the Secretary of the American Institute of Architects on the second floor.

The Washington Chapter and the Washington Architectural Club have both fitted up their rooms thoroughly and comfortably, leaving the third-story rooms the only portion of the house that was not repainted and repaired, which, at present, are rented by artists. The old mantel and cornices on the first floor were found in a remarkably well-preserved condition; all portions that were missing were duplicated and replaced. The old stone steps and wrought-iron railing have been replaced by new steps and portions of new railings. Parts of the old wrought-iron work was still in existence; these were used and their features duplicated.

A modern toilet-room and furnace have been installed in the house, and the necessary furniture for the secretary, consisting of a typewriter, safe, desk, chairs, letter-press, etc., have been purchased. The old garden has been planted with box, fir, and old-fashioned flowers, so as to be in keeping with the house, giving the whole quite an interesting appearance. All of the books, models, pamphlets, paintings and photographs mentioned as having been contributed, have been installed in the Octagon House, and are already of sufficient importance to make a very interesting exhibit.

Under the Tarsney Act, and its influence, a result of the work of the Institute in previous years, some noted compositions have been very satisfactorily conducted by the United States Government; the New York Customhouse; the Carnegie Library, Washington, and the new Department of Justice, have all been let out under competitions more or less model in their form. The results obtained have been very satisfactory. The work of the Legislative Committee will be given more fully in its report to the American Institute of Architects.

The office of the Institute has been kept open from nine o'clock in the morning until six o'clock in the afternoon, and members of the Institute visiting Washington are received and all possible courtesies extended to them by the secretary or his assistant.

After the reports from standing and special committees were received, the following special committees were appointed, to which recommendations contained in the reports were referred:

Committee on President's Address—A. D. Andrews, of Boston; E. H. Kendall, of New York; J. C. Hornblower, of Washington.

Committee on Report of Board of Directors—H. L. Warren, of Boston; A. L. Brockway, of New York; George Beaumont, of Chicago.

Committee on Report of Chapters—Robert Sloel, of Washington; N. S. Patton, of Chicago; Charles I. Berg, of New York.

The afternoon session was occupied in listening to a paper upon "Electricity in Modern Buildings," by E. Rowland Hill. Afterward the members accepted an invitation from the Westinghouse Electric & Machine Company to inspect its plant, a special train being provided by the company to convey the members.

The evening session was devoted to the reading and consideration of papers upon "The Influence of the French School of Design on Architecture in this Country," and proved to many the most interesting session of the convention.

Mr. H. Langford Warren, of Boston, opened the discussion of the subject, "The Influence of the School of Design Upon American Architecture," by saying this influence has been a factor since the Revolution and its discussion would require the consideration of our architecture as well as that of France since that time. Mr. Warren made brief chronological mention of notable architects and periods in both countries and the predominating influence of the Ecole des Beaux-Arts. Americans have been learning that the one thing that has been needed was improvement in artistic taste and that there is something better than novelty and change. What is beautiful and reasonable is ideal and not that which is up-to-date or in fashion. What is needed is a fuller understanding of the fundamental principles of the art to know and understand thoroughly the architectural forms of the past and appreciate how in them principles were expressed. We have learned much from France and have much yet to learn, but we should not take from her indiscriminately. In so far as French influence helps us to sound methods of education and discourages hasty and slipshod and ill-studied work its influence is and will be helpful and wholesome. It is best that impressionable students should not come under its direct and exclusive influence until they have received training that will enable them to discriminate and reason for themselves in regard to their art.

Mr. R. A. Cram, of Boston, held that of the styles of the recent past in this country "Queen Anne" and the rest were merely episodes, and generally discussed the inadequacy of foreign design for practical use in this country. Therefore it is worse than useless to discuss whether Parisian Renaissance is a good or bad style—for France. The influence of the French school is good just so long as it influences solid and lasting principles, of planning, of composition, of design, but above all let us have architecture and not bigotry.

A paper was also read by A. L. Brockway and discussed by Cass Gilbert, R. D. Andrews, Frank Miles Day, T. C. Young, and others.

W. C. Brown, of the Pittsburg Plate Glass Company, addressed the convention upon the subject of plate glass manufacture, preparatory to a visit to the works of the company the following day.

After the session adjourned, the members were invited to inspect the Allegheny county courthouse, and many accepted.

On Wednesday morning, in place of a session, the works of the Pittsburg Plate Glass Company were visited, where, under the guidance of Mr. Pitcairn, a most instructive inspection of the art of plate-glass making was enjoyed. A special train of Pullman cars conveyed the members to and from the works, and a luncheon was served on the train. The company had called in its agents from different cities throughout the country, who lent valuable assistance in caring for the guests.

The afternoon session was opened by the reading of instructive papers by H. R. Marshall and Charles H. Blackall, on "The Legitimate Design for the Casing of Skeleton Steel Structures." From Mr. Marshall's remarks it was learned:

"That we must avoid lying about our structures, for the simple reason that deceit is disagreeable as soon as it is discovered.

"That for the sole purpose of adding beauty to a building there is no objection to the use, in a purely decorative way, of beautiful forms which have in the past been evolved because of constructional values other than those especially appropriate to our building, provided they are not used in a way that will deceive. This has always been the practice of architects in the past, and only by slow steps have styles been evolved in which decoration inappropriate to new structural demands has been eliminated. We may labor to this latter end, but we can not hope to retain beauty in our structures if we concentrate our attention upon logical development rather than upon beauty of effect.

"That the expression of structure is in itself one of the most permanently effective elements of architectural beauty, and that, therefore, it should be emphasized, so far as is possible, without destroying other equally or more important elements of beauty.

"Whatever else we do, we should strive to produce beautiful buildings, whether we express structure and use or not; and while we should never forget that the expression of structure and use are among the most effective elements in an esthetic result, nevertheless we should bear in mind that they are always of less importance than beauties of line and proportion and mass.

"But let us never, on any ground, condone ugliness of proportion or detail. Let us never offer as a plea, in extenuation of ugliness, that our building is logical, that it truly expresses its internal use and its structural method. That is but the excuse of incompetence, and itself proves the man who offers such an excuse to be a builder merely, and not an architect.

Mr. Blackall, in the course of his remarks, said: "Our modern tall office buildings have shown what can fairly be termed a true development of style, and in this respect it seems fair to say that they can rank with the productions of the great building periods of the past; for the typical design for an early Christian church, a Greek temple, or a Gothic cathedral, was hardly more fixed in its general essential characteristics, in the division of parts, the scheme of design, and the essence of the decorative treatment, than our modern commercial buildings. Rightly or wrongly, if we may fairly judge by the majority of tall buildings which have been erected of recent years, there is a distinct principle involved in architectural design as applied to a building of ten stories and upward.

"The first essential requisite of an architectural structure, according to my mind, aside from matters purely of strength and stability, is that it shall be beautiful; beautiful in the fullest meaning of the word, the beauty which results from proportions which please even if they can not be subtly analyzed, beauty which satisfies the trained mind from its coherency, and beauty which will endure through at least the life of the one who created it. And the question of absolute fitness of Renaissance, of Gothic, Richardsonian or Sullivanesque need not trouble us half so much as the question of whether the completed building is architecturally beautiful.

"But I feel I am wandering again from the exact limitations of my subject, and so to save myself I will recapitulate what my architectural creed is. First, the most successful type of design is one which treats the front as a column with a marked base, square edged, rather small windows spaced regularly over a plain shaft, and a rich, blooming crown, proportioned to the height of the whole building. Second, the safest vehicle for expressing the ornamental details of a building is the classic or the Italian Renaissance, because it is a style which was evolved under conditions much similar to our own, and it is one which affords infinite variety in mass, and the utmost delicacy and beauty in detail. Third, the legitimate design for the casing is purely a matter of decoration not involving any necessary accusation of the construction. And, finally, no matter what we do, if our hearts be true and our buildings beautiful."

In the discussion which followed the papers of Mr. Marshall and Mr. Blackall, Mr. Gibson said that one of the first principles recognized in the treatment of skeleton frame buildings was their emancipation from methods in vogue thirty years ago. The chief point in each paper seemed to be that utility is the chief end and not architectural beauty. Referring to Mr. Marshall's paper, he said that the modern steel structure was similar to the construction of a beautiful screen wall. In the history of architecture one motive was an enclosing wall perforated by openings, and the other the post and beam construction, and in these two motives there is a distinct and separate source of inspiration. When we

pile these different qualities together we bring the post and beam method in a different relation, and it becomes a very highly ornamental part of the construction. I believe that this development is really the American style, and none but a few would be mistaken for those of any other country, as all work of all periods was certainly what we call style. Is it not time that we should try to conceive a style apart from the different forms of the orders?

Mr. Morgan, of Atlanta, Georgia, sent a paper discussing the subject, which was read by the secretary.

Mr. Jenney said that the definition for a skeleton-steel building seemed to be a building where the entire structure was carried story by story on its columns. It seemed that the Gothic lent itself better than any other style to the design of a tall building and also was well adapted to interior treatment. In designing a high building can it not be considered as the tower of a Gothic cathedral?

The following report from the Committee on Education was then presented by H. Langford Warren:

REPORT OF THE COMMITTEE ON EDUCATION.

Your Committee on Education has held no stated meetings during the year, but several members have met together on different occasions, and have discussed the subject matters of this report, and the chairman of the committee has corresponded with all the members.

Your committee, following its recent policy of endeavoring to keep the profession informed as to the condition of architectural education throughout the country, presents a brief report with regard to the principal architectural schools based on statements received from those in charge of the instruction in these institutions. . . . .

[After describing the changes in character of curriculum, number of students, etc., since last report of the several schools — Massachusetts Institute of Technology, Cornell University, University of Illinois, Columbia University, University of Pennsylvania, Syracuse University, Architectural Department of the Art Institute, Chicago, etc. — the report makes particular mention of the Harvard School.]

The endeavor of the Department of Architecture at Harvard has been from the first to encourage the development on the scholarly side of our profession. The courses of Prof. C. H. Moore and Mr. Edward Robinson in the History of Fine Arts, and of Professors White and Greenough in Classical Archæology, form important parts of the curriculum, while the department lays the greatest stress on the study of architecture as a fine art, and devotes the largest portion of the time at its disposal to drawing and design. There are naturally an increasing number of college graduates in the course, and the hope is that the work of the department will come more and more to be regarded as post-graduate work. An experiment previously tentatively tried, is now in full and successful operation — that of obtaining the assistance in the advanced instruction in the department, of the committee of architects appointed by the Board of Overseers. The plan pursued is for each member of this committee to visit the department, in turn, to have charge of one of the advanced problems with the aid of the instructors in the department. This brings the members of the visiting committee into direct contact with the students, and gives them a familiarity with the work of the school which is impossible under the plan sometimes pursued of having outside architects criticise the students' work after it is done. The present members of the committee are Mr. R. S. Peabody, Mr. Edmund M. Wheelwright, Mr. A. W. Longfellow, Jr., Mr. R. Clipston Sturgis. The plan has worked very successfully, and promises to give to the department the advantage of the aid of prominent practitioners in the advanced work of the school. In other respects the new year opens most promisingly for the department.

In addition to the schools the architectural clubs throughout the country are important factors in our architectural education. Now that these clubs have concentrated their forces, and have formed a national organization, The Architectural League of America, the way seems open for the American Institute of Architects to come into some direct relationship to them through the national body. "The American Institute of Architects" should embrace all the interests which affect the profession. Just as the older men in the profession do not perform their whole professional duty unless they establish helpful relations with the younger members, and especially with the draftsmen in their own offices, so the Institute will fail to completely exercise its proper function unless it also reaches the younger men. It is probable that this can best be done through the recently established Architectural League of America, and it seems not impossible that the League might hold to the Institute some such friendly official relation as the Architectural Association in England holds to the Royal Institute of British Architects. Your committee, therefore, suggests that the Board of Directors of the Institute be instructed to approach the officials of the Architectural League of America and invite them to appoint members of a joint committee to consider and formulate some scheme of mutually helpful coöperation.

In their last report, your committee referred to the fact that the architectural schools are now turning out graduates at the rate of over seventy a year and that the number of graduates in the country far exceeds the number of members now in this Institute. They, therefore, recommend that the Institute consider the advisability of requiring that candidates for admission to its ranks shall be either graduates of a recognized school of architecture, or shall pass an examination, to be held by the Institute itself, as a test of fitness. Your committee desires to renew this recommendation. All the members of the committee feel that the time has come when this question should receive careful consideration, while a large majority join in urging that steps be immediately taken looking to this end. In England the requirement of a graded series of examinations for admission to the Royal Institute of British Architects has worked well and has not had the evil results its opponents feared. After an interregnum, during which older practitioners could still be admitted without examination, the changed conditions have now for some years been in operation, and an architect can now become a fellow only by going through the stages of probationer, candidate and associate. Moreover, in one respect, the conditions of the profession in this country are more favorable to such a step than those existing in England at the time when a somewhat similar step was taken there. The existence here of a number of thoroughly organized and equipped professional schools makes it easy to require that candidates shall be graduates of these schools, and does not involve the establishment of the elaborate machinery which was required in England. But your committee feel it to be important, if this change is made, that a way shall be open for the admission to the Institute of those not graduates of the schools, by providing that they may pass a special examination to prove that their professional knowledge reaches the required standard. It is further quite clear that such a change should not be suddenly put into operation, but that a date should be set, several years ahead, after which the new requirements of admission would become entirely operative; and meanwhile, the new method could be immediately tried and both methods of admission could be simultaneously used. The younger and less known men could be admitted to associateship on examination, or on the strength of their diplomas from the architectural schools after the requisite number of years spent in practice, while the older men could be admitted on the strength of their records. This plan would have the advantage (during the proposed interregnum) of allowing the Board of Directors to exercise its discretion, and to insist, in any doubtful case, upon the candidate taking the examination or producing the diploma of a recognized school. So far from tending to reduce the numbers of the Institute, it is believed that such a step would tend to increase its membership, as well as to strengthen its prestige. It is obvious that at present the Institute is very far from numbering in its ranks, or even in the ranks of its Chapters, all American architects of training and of good professional standing. If membership in the Institute becomes the sign of attainment of a definite standard, it will be recognized as an honor to be numbered in its ranks. It will seem worth while to join the Institute to many who have hitherto not cared to do so, and it will not be long before all those able to attain this honor will seek it.

It will be observed that this report contains two definite recommendations:

First, That a conference be invited with the Architectural League of America, looking, not to union, but to some form of official and friendly coöperation; and

Second, That the Institute immediately consider the advisability of taking steps to so change its By-Laws as to require, after a specified date, say after January 1, 1905, graduation from some recognized architectural school or the passage of examinations to be held by the Institute, as a prerequisite of membership; and that, meanwhile, both methods of admission be simultaneously in operation, it resting in the discretion of the Board of Directors to require in any given case that the candidate enter by the new method.

Respectfully submitted. For the committee,
H. LANGFORD WARREN, Chairman.

The report was well received and the president suggested that the Committee on Education confer with the Committee on President's Address; and on motion of Mr. L. D. C. Berg, the joint committee was instructed to prepare such amendments to the Constitution and By-Laws as would conform to the recommendations embodied in the report of the Committee on Education.

On motion of Mr. Ittner, the Board of Directors was instructed to confer with the Architectural League of America to consider if there were any points in which the League and the Institute could be mutually beneficial.

Mr. Coxhead spoke in favor of the several Chapters taking an interest in the draftsmen who are not graduates of technical schools, and by motion this was referred to the Committee on Education. The report was discussed by Messrs. Gibson, Berg, Gilbert and others.

The report of the Joint Committee on President's Address and Committee on Education was as follows:

The American Institute of Architects:

GENTLEMEN,— The president specially commends to the Institute the following subjects:

1. The relations of professional schools with the Institute.
2. The relations of junior professional societies with the Institute.
3. Government competitions.
4. University of California competition.

The Institute has already taken action upon the second of these subjects, the relations of junior professional societies.

Your Committee on the Address has worked in association with the Standing Committee on Education, as directed by the convention, upon the first subject — the relations of professional schools with the Institute. These committees agree that no change in the By-Laws is needed to secure the ends contemplated by the president, namely, the presence upon the Committee on Education of the Institute of members who are professors or instructors in professional schools.

Regarding the establishment of courses of study and prizes for students in professional schools, or the schools of the junior societies, we recommend that the suggestions of the president be referred to the Committee on Education for further consideration.

Regarding the third subject of the address — Government Competitions — this committee heartily endorses the opinion of the president that the Government is entitled to the thanks of the Institute for the progress that has been made in the more general employment of the profession at large upon Government work. We desire to recognize in this connection not only the Secretary of the Treasury, whose achievement in this direction is well known, but also wish to point out that the Attorney-General, in opening the Judiciary building to limited competition, and the Secretary of the Navy, in performing a similar service at Annapolis, are equally entitled to the thanks of the Institute. To the Supervising Architect of the Treasury, also, we owe a debt of gratitude for his sympathetic efforts to make these competitions successful in the best sense of the word.

Your committee accordingly recommends the adoption of the following resolution, and the transmission of the same to the Attorney-General and the Secretaries of the Treasury and of the Navy, respectively:

"*Resolved*, That the American Institute of Architects hereby desires to express to the Secretary of the Treasury, the Attorney-General and the Secretary of the Navy, its cordial appreciation of the sympathetic attitude he has maintained toward the Institute in its efforts to raise the standard of design in Federal buildings.

"We further endorse the opinion of the President that the Legislative Committee on Government Buildings should be continued."

In regard to the fourth subject of the address — the University of California competition — your committee is of the opinion that nothing but praise is due to the University authorities for the far-sighted way in which the future building operations at Berkeley have been conceived. We admire Mrs. Hearst for the liberality of mind she has displayed in making, possibly in a pecuniary way, the first steps of this great undertaking; we congratulate those in charge of the competition that no shadow of unfairness rests upon their conduct, and we most cordially welcome M. Besnard to the ranks of American practitioners, and rejoice that a substantial recognition of his genius — which was by circumstances denied to him as the author of the design of the beautiful portico of the Fine Arts building at Chicago — should have come to him from this country.

At the same time, the Institute wishes to state in the clearest terms its conviction that the form of competition employed in this case was an improper form of competition, and one to be generally reprobated. Unlimited competitions are disadvantageous both to the profession and to those who institute them. They are disadvantageous to the profession, because they seek to get more than is paid for, and thus encourage the lowest form of commercialism, i. e., gambling, among the younger men of the profession. They are disadvantageous to the promoters, because unlimited competitions in effect exclude the majority of the leaders of the profession from participation in the service of the promoters.

The University of California, by its mistaken judgment in establishing an unlimited competition, deprived itself of the services of the very men in this country best fitted to advise it.

The report of the Committee on the President's Address was duly adopted.

The chair appointed the following Committees on Nominations: H. Langford Warren, Amos J. Boyden, Edward Stolz; and Robert Stead, Charles F. Schweinfurth and W. B. Ittner.

At the evening session a full attendance listened to three excellent papers: "Architecture, the Sister Arts and Artistic Trades," by Levi T. Scofield, of Cleveland, Ohio; "Sculpture in Its Relation to Architecture," by William Ordway Partridge, of New York, and "Mural Painting in Its Relation to Architecture," by Elmer E. Garnsey, of New York. The papers were discussed by Professor Ricker, A. C. Everett, A. O. Elzner, Alfred Stone and G. O. Totten. The latter made an address of considerable length and interest.

The session adjourned to visit the Carnegie Library and Art Exhibition, which remained open until midnight on that occasion.

The last day of the convention was occupied by three sessions and a visit to the Carnegie Steel plant at Homestead.

At the opening of the morning session the reports of the Nominating Committees were presented, and Mr. E. H. Kendall, who was nominated for the office of president on one ticket, withdrew his name in favor of W. L. B. Jenney, of Chicago. The voting was close, Robert S. Peabody, of Boston, being elected president, and for Washington, instead of Cleveland, being designated as the place for the next convention, each by a majority of two and three. Before the announcement of the ballot, on motion of Mr. Warren, it was decided as the sense of the convention that each alternate annual meeting of the Institute should be held at the headquarters at Washington. Mr. Warren said, in support of his motion, that it was time that the Institute paid the expenses of the annual meeting and relieved the local Chapters. That it was important that frequent meetings be held at Washington, that national architecture might be influenced in a broad way throughout the country.

An invitation was received through the Cleveland Chapter from the mayor, council and city clerk of that city to hold the next convention there.

Mr. Gibson spoke for the board of directors in regard to an advisable change in the form of the Schedule of Charges, and recommended the amendment of the Code. That charges for potential services for general plans in case of abandonment of work should be 2½ per cent, and where details had been made 3½ per cent. That a charge of one per cent should be made for preliminary sketches.

The announcement of the ballot for officers was as follows:

President, Robert S. Peabody, of Boston, Massachusetts.

First Vice-President, William S. Eames, of St. Louis, Missouri.

Second Vice-President, Frank Miles Day, of Philadelphia.

Secretary and Treasurer, Glenn Brown, of Washington, D. C.

Directors for three years — Henry Van Brunt, of Kansas City, Missouri; James B. Hill, of Washington, D. C., and Normand S. Patton, of Chicago, Illinois.

J. W. Yost, of Columbus and New York, read an interesting and somewhat elaborate paper upon "The Influence of the Jews in Architecture." This was followed by Prof. William Roach Ware, of Columbia College, in a paper on "Competitions." This was an exhaustive review of competitions and competitive methods and was listened to with the deepest interest, the auditors realizing that it was the result of many years of observation and the closest study of the problem.

On motion of Mr. Stone, the board of directors was ordered to prepare a code for the government of competitions on the lines recommended by Professor Ware and present it to the next convention, and that gentleman was invited to serve as advisor to the board in the matter.*

The afternoon session was short, Mr. F. H. Kindl, of the Carnegie Steel Company, who seemed to be well known to the delegates, making a brief address descriptive of the process of steel-beam manufacture, and the convention adjourned to inspect the works of the company at Homestead. An instructive inspection of the works followed and the visitors received a realizing sense of the immensity of the steel-making industry under control of the Carnegie Company.

At the evening session, on motion of Mr. Hornblower, seconded by Mr. Gibson, the board of directors was directed to appoint a committee to provide a selection of architectural drawings for exhibition at each annual convention.

Mr. Ittner moved a vote of thanks, which was heartily accorded, to the several manufacturing concerns, the Standard Manufacturing Company, Westinghouse Electric Company, Pittsburg Plate Glass Company, and the Carnegie Steel Company, for their many courtesies extended, to the Pittsburg Chapter for the entertainment of ladies accompanying the delegates. Mr. Gibson moved a vote of thanks to the Cleveland Chapter and City of Cleveland for the extended invitation, which was appreciated though it could not be accepted.

The convention then adjourned to meet in Washington, D. C., in the fall of 1900.

PAINTS IN ARCHITECTURE.

HOW TO SECURE GOOD PAINT.

DURING recent years there has been a concerted effort to set up "purity" as a fetich in the paint trade. The real purpose of painting has been entirely forgotten in an effort to establish purity as the sole criterion of value.

But it is easily seen that if a pigment or a vehicle is not inherently durable, absolute purity will not improve it, and may, indeed, prove a drawback. The chemists of the Pennsylvania Railroad, who have canvassed the subject in a series of exhaustive experiments covering a series of years, have published their conclusions that, in the matter of durability and economy, purity is not only unnecessary with the majority of pigments but decidedly detrimental. For tinted or white paints they condemn absolutely the use of either straight lead or straight zinc, recommending an equal volume of each, and the final incorporation of as much inert pigment as can be used without affecting the color.

This is a sensible proposition, and accords with the results obtained in practice by the leading paint manufacturers. Architects are very chary about specifying straight zinc for outside use, because there has been no organized effort to introduce this practice; but straight lead, which is, if anything, more objectionable, is freely specified, in the face of all expert testimony against such usage, simply because there has been a well-sustained and vigorous propaganda to exploit white lead.

The best usage requires the use of combination bases, and such bases can not be made satisfactory in color or in durability without the admixture of zinc-white. Nor is it sufficient that such combinations should be made by hand labor in the paintshop. The intermingling of pigments must be intimate and uniform, and such intimacy and uniformity can be secured only by mechanical means. In other words, the only possible way to secure a durable and satisfactory white or tinted paint is to insist on a combination base of lead and zinc, with or without an inert diluent, and to have them combined in the factory.

Charles Jourdain.

*It was impossible for the Secretary of the Institute or the publishers of this journal to procure the original manuscript or a copy of this paper within two weeks after its delivery, and for this reason it is omitted.—Editor.

MOSAICS.

The design for the new building for the Chicago National Bank is being obtained by a paid and selected competition. The competitors selected include the Chicago firms of S. S. Beman, D. H. Burnham & Co., Henry Wade Rogers, H. B. Hill, Frost & Granger, and others.

The next important competition under the Tarsney law will be for a customhouse at Baltimore, Maryland. The building is to cost $1,500,000. The architects invited by the Secretary of the Treasury to participate in the competition are: Baltimore—Joseph E. Sperry, Baldwin & Pennington, Henry Brauns, Jackson C. Gott, Charles E. Cassell, Wyatt & Notling; Boston—Winslow, Wilherell & Biglow; New York—Earnest Flagg; Philadelphia—Frank Miles Day; Chicago—S. S. Beman; Washington—Joseph C. Hornblower. Each of these competitors will select four architects, and from these recommendations the four receiving the highest number of votes, with the Supervising Architect, will constitute the board of judges.

New York, November 11, 1899.

Editor Inland Architect:

I am instructed by the New York Chapter, American Institute of Architects, to forward to you for publication the following resolutions which were adopted at the special meeting of the Chapter held on November 1, 1899, and which were forwarded at once to Honorable Lyman J. Gage, Secretary of the Treasury:

Whereas, The selection of the Commission to pass upon the designs for the New York Customhouse is a matter of regret; and

Whereas, The New York Chapter of the A. I. A. can not approve of the methods adopted by this Commission in arriving at a decision; nevertheless,

Resolved, That in the absence of other evidence of want of good faith on the part of this Commission than has been made public, it is to the best interest of the architectural profession that the award of this Commission be confirmed by the Secretary of the Treasury.

Yours respectfully,

Charles I. Berg,
Corresponding Secretary.

[As it seems to have been the wish that the above resolutions be placed on record — after being held back for two weeks by the secretary according to instructions — they are now printed.—Editor.]

OUR ILLUSTRATIONS.

Residence of J. H. Adams, Pasadena, California.

Germania Bank, New York city. Robert Maynicke, architect.

View in Hall. Residence of Architect W. J. Dodd, Louisville, Kentucky.

Residence of John F. Campion, Denver, Colorado. Gove & Walsh, architects.

Competition Design for United States Customhouse, New York city; submitted by D. H. Burnham & Co., architects, Chicago.

Residence of W. A. Stanton, Pittsburg, Pennsylvania. Thomas H. Scott, architect. The exterior and View in Den are shown.

Residence of S. Grabfelder, Louisville, Kentucky. W. J. Dodd and Arthur Cobb, architects. View in hall and view of main stairway are shown.

Grand Prize of Rome Competition, for State Bank, École des Beaux-Arts, Paris; Second Prize Design by M. Sirot; Third Prize Design by M. Senes.

Photogravure Plate: The Nebraska Building, Omaha, Nebraska. Walker & Kimball, architects.

PHOTOGRAVURE PLATES.

Issued only with the Photogravure Edition.

German Restaurant.

Residence at Edgewater, Chicago.

Residence at Edgewater, Chicago. George W. Maher, architect.

Saddle & Cycle Club, Edgewater, Chicago. Jarvis Hunt, architect.

Lake View High School. Norman S. Patton, architect, Chicago.

Public Library Building, Omaha, Nebraska. Wilker & Kimball, architects.

Residence of Scott Jordan, Edgewater, Chicago. Charles I. Williams, architect, Dayton, Ohio.

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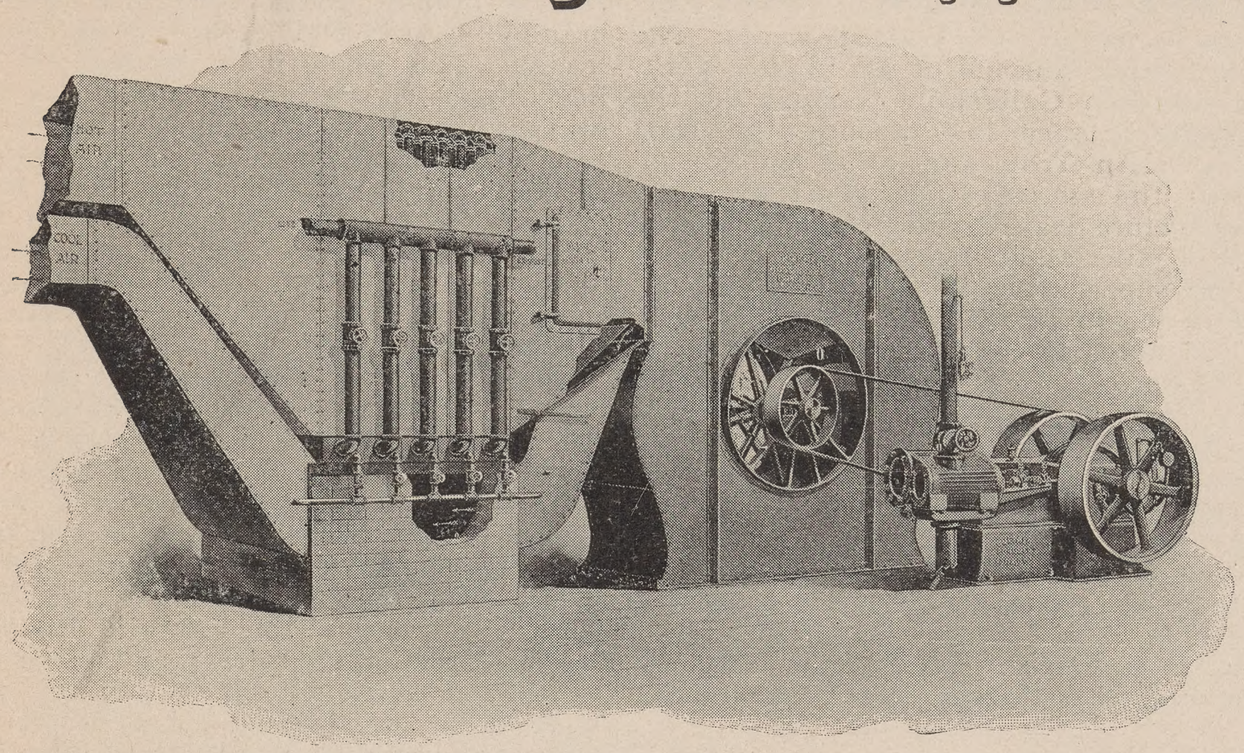

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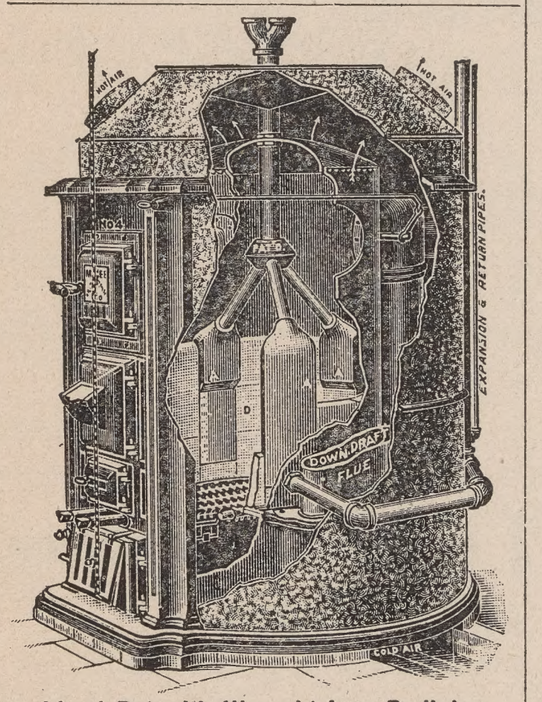

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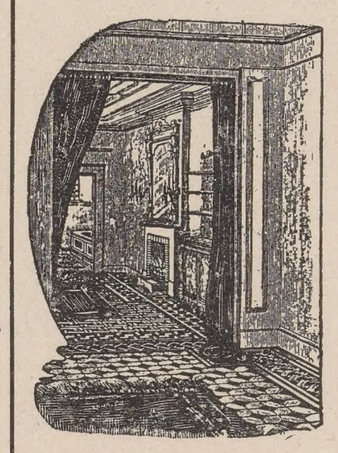

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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXXIV. ADVERTISERS' TRADE SUPPLEMENT. No. 5

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

REQUESTS FOR CATALOGUES AND SAMPLES.

Those wishing catalogues and samples sent them by dealers in general may have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give THE INLAND ARCHITECT due credit for business benefits that result.

ARTHUR J. WILLIAMS, Architect, Oklahoma City, Oklahoma.

MORRISON H. VAIL, Architect, Unity building, Chicago, has opened a branch office at Dixon, Ill., and desires catalogues and samples.

MR. JOHN STAFFORD WHITE, who has been in charge of the draughting room of the St. Louis office of Messrs. Shepley, Rutan & Coolidge, for the past three years, announces that he has opened an office in the Chemical building for the practice of architecture, the rendering of architectural drawings in water color and pen and ink, and the making of special designs for furniture, gas fixtures, etc. He will be pleased to receive samples, etc., from the trade.

ARCHITECT, Box 307, Vicksburg, Mississippi, will be glad to receive catalogues of all classes of building materials.

The general offices of the J. RIELY GORDON COMPANY, Architects, have been moved from San Antonio, Texas, to their new building, corner Main and Field streets, Dallas, Texas, where they will be pleased to receive catalogues and samples.

A LARGE CONTRACT.

The Buffalo Forge Company, after severe competition on the part of English and German manufacturers, has been awarded a Hawaiian contract for the supply of four 50-horse-power and two 75-horse-power, high speed, vertical center, crank engines, which will run in oil. A direct-connected pressure blower will also be supplied and a 300-light generating set. This machinery is intended for the American Sugar Company's newly acquired plantation, which is situated on the island of Molokai, one of the Hawaiian group. The plantation covers some 93,000 acres of extremely fertile land. One tract comprises 8,000 acres of the finest cane lands, which are all situated below the 400-foot level. It is expected to yield some eight tons of sugar per acre. It is believed that the American Sugar Company's expenditure will reach $1,700,000 before the plantation will be in full running shape. Four hundred thousand dollars will be spent on machinery alone.

THE UP-TO-DATE STORE WINDOW.

The modern mercantile building, particularly that built for retail trade, shows improvement in nearly every feature over that built even a decade ago. Yet in some respects architects do not "keep up with the procession." This is noticeable, for example, in the lighting of show windows. We know that very frequently the choice of fixtures is left to the owner or lessee, yet they would probably follow the architect's advice.

In the lighting of a painting, architects know there is but one way to do it to advantage. Is not the problem of lighting a show window exactly the same? Will not the arrangements and the principles used in the leading art galleries perfectly fulfil the requirements of window lighting? In the matter of picture lighting, there is a remarkable consensus of opinion among curators of art institutions that has been arrived at after repeated competitive tests. Mr. I. P. Frink, of New York, has been chosen in almost all cases to light important collections of paintings. Here in Chicago his system is installed in the Art Institute, and was chosen as the only perfect one for lighting the Art building at the World's Fair, where he received the highest awards. The Metropolitan Museum of Art in New York, the Corcoran Gallery in Washington, the Carnegie Library in Pittsburg, the Hart Memorial in Troy, and other public galleries; the stores of nearly all the New York picture dealers, and a large number of private galleries, all lighted by him, testify to the superiority of his system and his experience in this line of work. He now manufactures the same lighting fixture for use in store windows, and directs its installment so that success is a certainty. What has been proven to be the best lighting of valuable paintings is certainly good for store windows. A memorandum of the dimensions of the windows is all that is needed to secure from him a careful estimate on the cost of his system for any particular building. We would advise writing him for figures and information. His address is 551 Pearl street, New York city.

A BIG FILL.

On the Deadwood (S. D.) branch of the Burlington Railroad is a gulch 700 feet wide, known as Sheep's Canyon. This was crossed until recently by a wooden bridge, 126 feet high, which took over 240,000 feet of lumber in the building. Recently this trestle was filled in, and the great undertaking attracted the attention of railroad men all over the country. It took twenty weeks to accomplish the task. It was necessary to haul 2,880,000 cubic feet of earth one and a half miles up a two-per-cent grade and unload off the high bridge. This required 1,486 trains of fifteen cars each; 22,000 carloads in all. It was a stupendous undertaking, but now the bridge can not burn, and it does not cost a lot of money every year for repairs and watchers.

N. & G. TAYLOR COMPANY.

N. & G. Taylor Company, Philadelphia, have a very attractive and interesting exhibit at the National Export Exposition, now being held in that city. They show a miniature house roof covered with the "Taylor Old Style" brand of roofing tin, one section flat seam and the other a standing seam. There is also to be seen a section of roof covered with tin shingles and tiles made from the same brand of tin. Under this roof is a wall or partition forming the background of the exhibit, and paneled with very interesting photographs of interiors and exteriors of the firm's tin-plate works. A handsome picture of old Independence Hall, which is well known to our readers, as being covered with this firm's special brand of Terne, the "Taylor Old Style," stands out conspicuously, and there is also a photograph of the White House or Executive Mansion, their brand, the "Taylor Old Style" also being used on this building. The firm also displays old prints showing how tin plates were made in 1714. They also illustrate the sizes of tin plates in use in the years 1720 and 1732.

Along the sides of the exhibit, in well-arranged boxes, are piles of boxes of tin plates representing the firm's well-known brands of bright tin, "Brilliant," tissue paper packed; "Royal," tissue paper packed; "Merion," "Linden," "Almond"; and in roofing plates, their own original brand "Taylor Old Style" extra heavy leaded. This plate it is claimed is the heaviest-coated roofing tin made, it is also evenly coated, the metal coating being equally distributed over the entire sheet by a special process of their own. This plate is made in the old-fashioned original way that roofing plates were first made in 1830, and then sold by them. They also show their "Taylor Roofing Tin," "Columbia," "Maple Redipped," "Knoxall" and "Globe" brands. The boxes are all open for the inspection of visitors. Samples of the materials used in the manufacture are also exhibited, such as tin, lead, palm oil, cleaning mixture, bran, flour, etc. Their ventilators and their makes of solder, babbitts, type metals, etc., are also displayed.

The firm received bronze and silver medals of award at the Franklin Institute held in Philadelphia in 1874, and also at the Centennial National Exposition in 1876. N. & G. Taylor Company's brands are not only a household word throughout the United States, but the firm advises us that their export trade has largely increased.

They issue a very neat photograph of their exhibit, which can be secured free of cost by applying to them.

TRADE NOTE.

Trade with all the Associated Expanded Metal companies is very brisk this summer. In fact, so much so that in certain lines of goods they are unable to fill orders promptly, and this is so notwithstanding material advances in the cost of steel.

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PROPOSALS.

TREASURY DEPARTMENT,
OFFICE SUPERVISING ARCHITECT,
WASHINGTON, D. C., November 21, 1899.

SEALED PROPOSALS will be received at this office until 2 o'clock P. M. on the 19th day of January, 1900, and then opened, for the construction (except heating apparatus, elevator and electric wire conduits), of the United States Public Building at Helena, Montana, in accordance with the drawings and specification, which will be furnished at the discretion of the Supervising Architect on application at this office or the office of the Custodian of the site at Helena, Montana.

JAMES KNOX TAYLOR,
Supervising Architect.

TREASURY DEPARMENT,
OFFICE SUPERVISING ARCHITECT,
WASHINGTON D. C., November, 29, 1899.

SEALED PROPOSALS will be received at this office until 2 o'clock P. M. on the 1st day of February, 1900, and then opened, for the construction (except heating apparatus, elevator, electric wiring and conduits) of the United States Public Building, Boise, Idaho, in accordance with the drawings and specification, copies of which may be had at this office or the office of the Postmaster at Boise, Idaho, at the discretion of the Supervising Architect.

JAMES KNOX TAYLOR,
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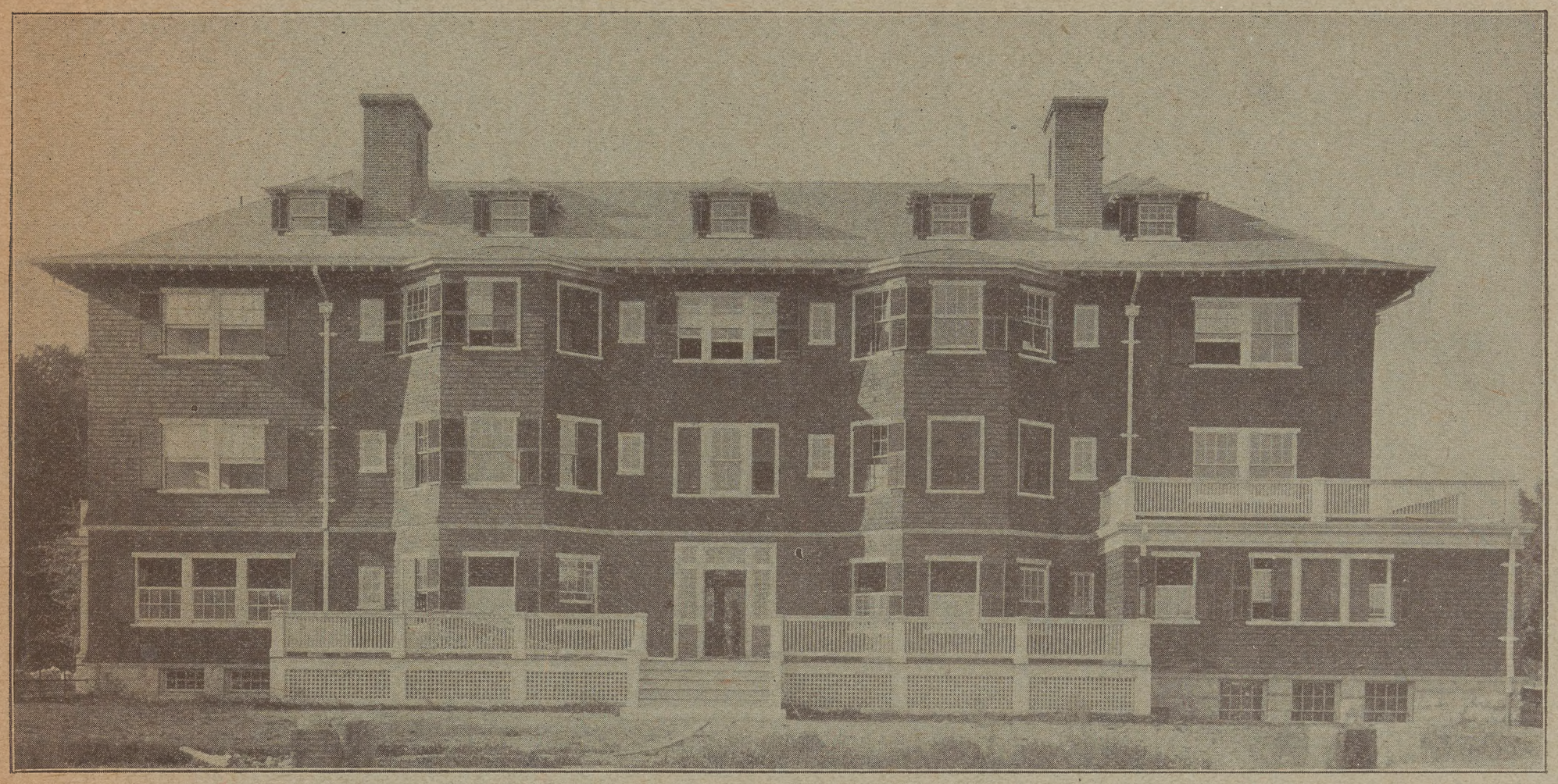

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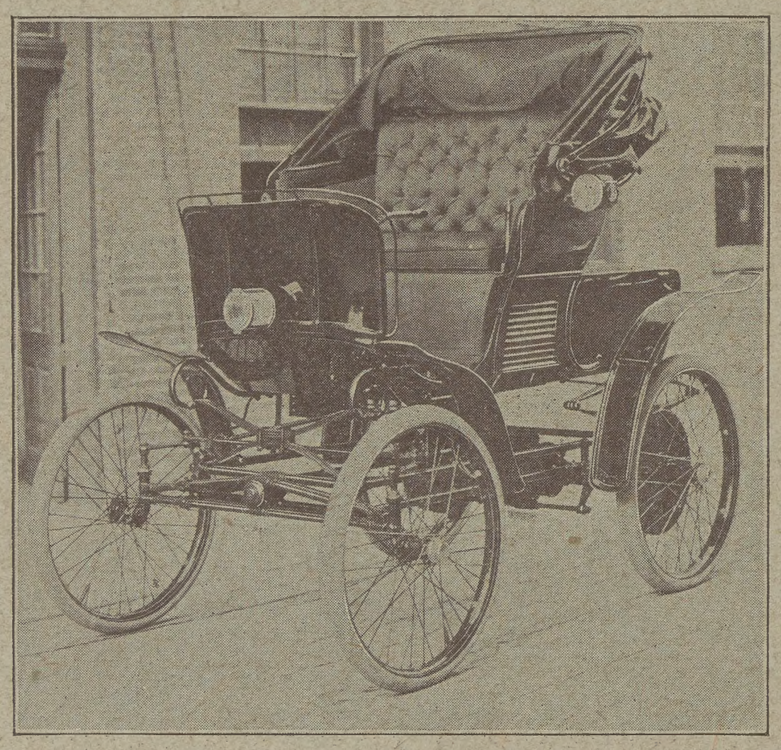

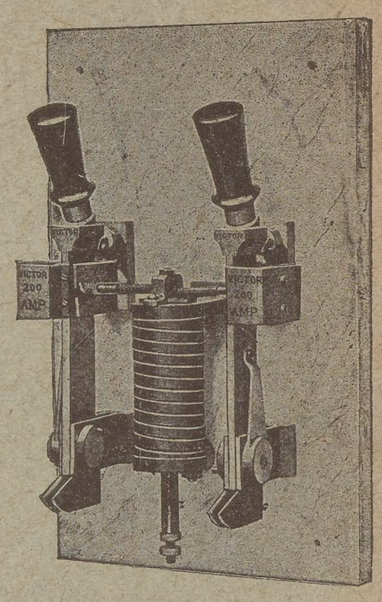

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